US ERA ARCHIVE DOCUMENT

APPENDIX A

FIELD DOCUMENTATION NOVEMBER TO DECEMBER 2007 (SECOND SEMIANNUAL) MONITORING EVENT





Groundwater Sampling Form Well No. MW-33

Client:	CHEVRON			Well Condition:	TOP CU	en rom		
Project:	ZNO 200	im i		Geologist:	Denala			
Project No.	500-017			Date:	11/9/20	⁹ 07		
	1		Well Info	rmation				
Casing Diameter	Gallons per Foot			Total Depth:	40.0			
1.5	0.09			Depth to Water:	27.05			
2	0.16			Depth to Product:				
4	0.65			Casing Diameter:	2//			
6	1.5			Water Column:	12.95'			
8	2.6	Casing Vol	ume (Water Column		2.074			
10	4.1	· ·		x Casing Volume):	6.219			
			, ,	,				
			Diama Infa	47				
Duran Stort Ti		30	Purge Info	ormation				
Purge Start Ti Purge Method		FLOW						
Flow Rate:		1.45 Cpm						
How Rate.		5.43 Cp/A						
	Volume		Specific					
Time	Removed	pН	Conductivity	Temperature د	DO	ORP	Turbidity	
1535	44	6.79	852.3	14.25	0.03	-360	56.8	
1540	5°C	6.82	858.5	14.63	0.06	-324	23.0	
1545	7.5	6.87	883.9	14.48	~O.O/	-405	165	
1550	10.0 L	6.83	919.3	14.19	-0.0z	-418	11.5	
155 E	13.5 L	6 89	948.8	14.22	-0.01	-429	9.4	
1600	15.5 L	6.82	377.3973.8	14.53	ଡ.୯୮	-419	68	
1605	16,5 L	6.84	9842	14.53		- 395	7.6	
1610	/8° L	6.81	10995.2	14,74	-	-405	5.0	
	-							
	• •			-				
Purge Finish T					·			
Total Volume R	-							
Final Depth to	Water: 27.	051		•				
		•						
			Sampling In	formation				
Wallhaad Gae	Measurements:	-			-			
Sample Collec		1615		<u> </u>				
-			(-					
Analytical Suite			LEAD					
QAQC Sample	is Conected:	NONE						
Notes:	Rust	d DARK OF	SANC FLAKES	INTERACLY .	(mada)1. Her	CUEAR		
	, 0,-1	NO SHEE	, , , , , , , , ,	som .	Solve 10	· •>=/1/		
		7.0 76+25-6) UEAR IIV IV	VVI-				



Groundwater Sampling Form Well No. Mu-23

Casing Diameter 1.5 2 4 6 8 10 Purge Start Time: Purge Method: Flow Rate: Time R 1440 3 1445 4	allons per Foot 0.09 0.16 0.65 1.5 2.6 4.1 433 Lou foot O. & & & & & & & & & & & & & & & & & &	Casing Vol	Well Info Well Info Well Info Purge Volume (3 Purge Info	Total Depth: Depth to Water: Depth to Product: Casing Diameter: Water Column: a x Gallons per foot): x Casing Volume): crmation	94.10 25.14 18.96' 3.03 9.10	, ,	
Casing Diameter 1.5 2 4 6 8 10 Purge Start Time: Purge Method: Flow Rate: Time R 1440 3 1445 4	alions per Foot 0.09 0.16 0.65 1.5 2.6 4.1 Lou F	Casing Vol حوں درس	lume (Water Column Purge Volume (3 Purge Info	Total Depth: Depth to Water: Depth to Product: Casing Diameter: Water Column: x Gallons per foot): x Casing Volume): prmation	44.10 25.14 18.96' 3.03 9.10		
Diameter 1.5 2 4 6 8 10 Purge Start Time: Purge Method: Flow Rate: Time R 1440 3 7445 4	Foot 0.09 0.16 0.65 1.5 2.6 4.1 4.3 Lou F	5 600 6pm	lume (Water Column Purge Volume (3 Purge Info	Total Depth: Depth to Water: Depth to Product: Casing Diameter: Water Column: a x Gallons per foot): x Casing Volume): crmation	25.14 18.96' 3.03 9.10		
Diameter 1.5 2 4 6 8 10 Purge Start Time: Purge Method: Flow Rate: Time R 1440 3 7445 4	Foot 0.09 0.16 0.65 1.5 2.6 4.1 4.3 Lou F	5 600 6pm	Purge Volume (3 Purge Info	Depth to Water: Depth to Product: Casing Diameter: Water Column: x Gallons per foot): x Casing Volume): primation	25.14 18.96' 3.03 9.10		
1.5 2 4 6 8 10 Purge Start Time: Purge Method: Flow Rate: Time R 1440 3 7445 4	0.09 0.16 0.65 1.5 2.6 4.1 Lou F	5 600 6pm	Purge Volume (3 Purge Info	Depth to Water: Depth to Product: Casing Diameter: Water Column: x Gallons per foot): x Casing Volume): primation	25.14 18.96' 3.03 9.10		
2 4 6 8 10 Purge Start Time: Purge Method: Flow Rate: Time R 1440 3 7445 4	0.16 0.65 1.5 2.6 4.1	5 600 6pm	Purge Volume (3 Purge Info	Depth to Product: Casing Diameter: Water Column: x Gallons per foot): x Casing Volume): crmation	18.96' 3.03 9.10		T
4 6 8 10 Purge Start Time: Purge Method: Flow Rate: Time R	0.65 1.5 2.6 4.1 1439 Lou F 0.6	5 600 6pm	Purge Volume (3 Purge Info	Casing Diameter: Water Column: x Gallons per foot): x Casing Volume): prmation	18.96' 3.03 9.10		
6 8 10 Purge Start Time: Purge Method: Flow Rate:	1.5 2.6 4.1 ———————————————————————————————————	5 600 6pm	Purge Volume (3 Purge Info	Water Column: a x Gallons per foot): b x Casing Volume): crmation	18.96' 3.03 9.10		T
8 10 Purge Start Time: Purge Method: Flow Rate: Time R 1440 3 7445 4	2.6 4.1 1439 Lou F 0.6	5 600 6pm	Purge Volume (3 Purge Info	x Gallons per foot): x Casing Volume): prmation	3.03 9.10		
10 Purge Start Time: Purge Method: Flow Rate: Time R 1440 3 1445 4	4.1 	5 600 6pm	Purge Volume (3 Purge Info	x Casing Volume):	9.10	000	
Purge Start Time: Purge Method: Flow Rate: Time R 1440 3	439 Lou F 0.6	520U Cp	Purge Info	ormation			
Purge Method: Flow Rate: Time R 1440 3 1445 4	Lou F O. 6 Volume	520U Cp			DO.	000	T
Purge Method: Flow Rate: Time R 1440 3 1445 4	Lou F O. 6 Volume	520U Cp			DO.	000	T
Purge Method: Flow Rate: Time R 1440 3 1445 4	Lou F O. 6 Volume	520U Cp	Specific	T	DO.		7
Flow Rate: Time R 1440 3 1445 4	O. 6	Cpm	Specific		DO.	000	
7 Time R 1440 3 1445 4	Volume	•	Specific		DO.	0.00	
) Time R 1440 3 1445 4		nН	Specific		DO	000	
1440 3 1445 4	Removed			Temperature			Translation .
1445 4	L	Pr.	Conductivity us/cm	o c	M9/2	MV	Turbidity
	3 L	6.93	912.8	15.24	1.00	-453	257.2
	-,756	6.91	916.1	15.08	0-89	-460	262.6
1450	8 4	6.90	916.3	14.97	<u>0.80</u>	-470	263.8
1455 i	24	6.90	916.0	14.79	⁷² 0.72	481	-
							40.5
							<u> </u>
				<u> </u>	·		
Purge Finish Time:	1455	5					
Fotal Volume Purged							
Final Depth to Water	r: Z <i>S</i> -/4			• .			
	•		······································				
			Sampling Inf	formation			
Wellhead Gas Measi	uramanta	からから					
Neimead Gas Meast Sample Collection Ti		1457					
Sample Collection Tr Analytical Suite Colle		Vocs Di	S CEAD				
QAQC Samples Colle		YONE DI) CEAS				
AUGO Gallibies Coll		NG		· · · · · · · · · · · · · · · · · · ·			



Groundwater Sampling Form Well No. Μω -/ ὸϤ

Chent:	CHEVICON	· · · · · · · · · · · · · · · · · · ·		well Condition:	<u>00000</u>					
Project:	ZND 100	7 11		Geologist:	Della	11/10/07				
Project No.	500-017-	610		Date:	11/10/6	7				
			Well Info	ormation						
Casing	Gallons per									
Diameter	Foot			Total Depth:	26.07	ľ				
1.5	0.09			Depth to Water:						
2	0.16			Depth to Product:						
4	0.65			Casing Diameter:	2"					
6	1.5			Water Column:	6.39 '					
8	2.6	Casing Vol	ume (Water Column	x Gallons per foot):						
10	4.1		Purge Volume (3	x Casing Volume):	3.06 g					
			Purge Info	ormation						
Purge Start Ti				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
Purge Method	1: <u>(a) 1</u>	-cw								
low Rate:	Ô.	-cω 375 ερπ								
		<u> </u>	1 WS/ch	٥٠	my/L	mV	NTE			
Time	Volume Removed	pН	Specific Conductivity	Temperature	ĎO	ORP	Turbidity			
1423	2.750	7.28	817.2	21.29	1.12	- 27	669.3			
1428	4.25	7.18	815.2	21.49	0.23	-88	176.3			
1438	8.0 6	7.20	811.1	21.12	0.16	-162	17.4			
1445	10.06	7.21	787 811.3	21.43	ins 0.19	D=180	6.4			
1450	12.0 L	7.21	810.3	21.58	0.20	-188	3.8			
							<u> </u>			
	•				- <u></u>					
							<u> </u>			
	ime: 1453	•				<u></u>				
urge Finish T										
otal Volume F inal Depth to				٠,						
nar Debin io	water. <u>17.0</u>									
			Sampling Inf	formation						
ellhead Gas	Measurements:	Pearline								
ample Collect	•	1450								
nalytical Suite	•	Vous No	s ceab							
AQC Sample:	•	MONE	3 3017							
	NO GOOR	, NO SHE	EN CLEAR							
otes:	/ 🗸 💝									

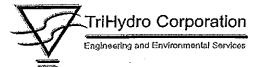


<u>ر</u>	04 00 · V				•		
Client:	CHENSON			Well Condition:	6000	7	
Project:	2ND 200			Geologist:	Dire	un	
Project No.	500-017-	<u>610</u>		Date:	11/10/0	<u> </u>	
·			Well Info	rmation			
Casing	Gallons per				<i>**</i> **********************************	4	
Diameter	Foot			Total Depth			
1.5	0.09			Depth to Water	r: <u>28.76</u>	•	
2	0.16			Depth to Produc	t: <u>#/</u> /		
6	0.65 1,5			Casing Diameter	" <u> </u>		
8	2,6	Coolng Vo	luma ANatas Oalissa	Water Column		·	
10	4.1	Casing vo	lume (Water Column				
10	4.1		Purge volume (3	x Casing Volume)	: <u>3.09 9</u>	 -	
							Í
D Olas 1.73	ime: 1310	l .	Purge Info	rmation			
Purge Start Ti			·				
Purge Method						•	
Flow Rate:		1275 Lpar	_				
	Volume		Specific	ەر	Mg/L	MV	NTU
Time	Removed	pН	Conductivity	Temperature	DO	ORP	Turbidity
1324	2 L	6.81	907.6	14.23	1.21	 	31.2
1329	3.256	6.83	911.3	14.68	0.96	-30	14.0
1334	4,25 L	6.82	939/2.7	15.11	280.91	-%53	7.8
1339	5,50 L	6.83	139.9914.6	15.15	082 0.83	-63-64	4.7
		·			50.0.0.3	1 3 0 7	F.7
					<u> </u>		
							
	10.44				<u> </u>		
Purge Finish T					-		,
Total Volume F		,	· · · · · · · · · · · · · · · · · · ·				
Final Depth to	Water: <u>28 -)</u>	6	**	•			
			Committee to the				
			Sampling Inf	ormation			
Wellhead Gas	Measurements:	Nowe					
Sample Collect	-	1340					
Analytical Suite	-	Vocs. Dis	(PAN				
QAQC Sample:	-	Nove					
,	-						
Notes:	No oper	NO SHEE	N CLEAR				
·			,				



Groundwater Sampling Form Well No. <u>M</u>ω-27

Client:	_CHEVRON			Well Condition:	RusteD	-TOP STIFF	(COMPRON
Project:	2NO 2007	IM	·	Geologist:	Duck	An	
Project No.	500-017-	010		Date:	11/12/	೭ ೮७७	
			Well Info	rmation			
Casing	Gallons per				44		
Diameter	Foot			Total Depth:	44.10		
1.5	0.09			Depth to Water:	39.87		
2	0.16			Depth to Product:	NP		
4	0.65			Casing Diameter:		• •	· ·
6	1.5			Water Column:		-	
88	2.6	Casing Vo	lume (Water Column				
10	4.1		Purge Volume (3	x Casing Volume):	2.049		
			Direct Info				
urge Start Ti	me: 16°.	31	Purge Info	ormation			
urge Method		FW					
low Rate:	-	_					
Time	Volume Removed	pН	Specific Conductivity	ر Temperature	Mg/L DO	ORP	N74 Turbidity
1645	5,25L	7.61	771.1	23.13	0.10	-535	405.1
1650	9,06	7.63	777.6	22.97	-0.01	-328	536.6
1655	11.06	7.75	791.8	23.23	-0.02	-416	7,
		· · · · · · · · · · · · · · · · · · ·					
							<u> </u>
1	. " t .					<u>.l</u>	_1
urge Finish Ti					•		
otal Volume P							
nal Depth to	Water:						
	•	·	Sampling Inf	ormation			
elihead Gas i	Measurements:				•		
mple Collect	ion Time:			- ·			
alytical Suite	Collected:						
AQC Samples	s Collected:						
	1100.	GIT *	4 - ROOT MA	11 m. 17			
tes:	1 10°C - 1	~~~ N/4	M - KMAT MA	24 Sh./K	D.W.P.		



Groundwater Sampling Form Well No. Mb. 655

And the second second							
Client:	Cheur	~~\		Well Condition:	6-0.0	•	
Project:		ZAM 2007		Geologist:	C-6.0 T. H. 1 11-12-	1	
Project No.	500-017-0			Date:	11-12-	-07	
						······································	
· [Well Info	rmation			
Casing Diameter	Gallons per Foot			Total Depth:	02 2	P	
1.5	0.09	-		Depth to Water:		<u> </u>	
2	0.16			Depth to Product:			<u> </u>
4	0.65			Casing Diameter:			
6	1.5			Water Column:			
8	2.6	Casing Volur	ne (Water Column	x Gallons per foot):			
10	4.1	•		x Casing Volume):		(114)	
				,		- , , <u> </u>	
Purge Start Ti Purge Method Flow Rate:	: Low) 1 () L /	Purge Info	ormation			
Time	Volume Removed	рН	Specific Conductivity	7emperature	My/L DO	ORP	Nrv. Turbidity
1252	7	6.84	1164	19.67	6.57	-62	123.7
1257	3.5	6.87	1099	. 19.46	0.07	-119	32.1
13:02	6.0	6.90	1075	19.58	0.04	-154	6.7
13:07	8.0	6.91	1067	19.62	0.04	- 159	5.3
			<u> </u>				
					 ,		
						 	
	-						
Purge Finish T Total Volume F Final Depth to	ourged: %	5.07 5.0 7.30			-	<u>. I</u>	
			Sampling Inf	ormation			
Sample Collect Analytical Suite QAQC Sample	e Collected:	NA 13:07 Unc 8260 Pl None					
Notes:	Ship+ 000r	HC-like (Elect No Ireen		· . <u>.</u>		



Client:

Groundwater Sampling Form Well No. Mo-651

Well Condition:

Good

Project:	IMGW	2nd 2007		Geologist:	J. Hel	/	
Project No.	<u> 300-017-</u>	-010		Date:	11-12-0		
			Well Info	rmation			
Casing	Gallons per						
Diameter	Foot			Total Depth:	44.1	Š	
. 1.5	0.09			Depth to Water:	17.4		
2	0.16			Depth to Product:	NO		
4	0.65	·	÷	Casing Diameter:	2".		
6	1.5			Water Column:	26.70		····
8	2.6	Casing Volu	me (Water Column	x Gallons per foot):	00.10165	·	
10	4.1	_		x Casing Volume):			
				,		<u> </u>	· .v
			Purge Info	ormation			
urge Start Ti	me: <u>12.15</u>	5 8600 .5 6/min	<u> </u>				
urge Method		Phil				*	
low Rate:	.2 -	.5 C/min	,				
Time	Volume Removed	pH ₽#	Specific Conductivity	Temperature	DO	ORP	Turbidity
12.17	1	7.05	859.7	16.04	7.72	-36	96.1
232	3,5	7.04	859.0	. 16.69	\dagger \(\sigma \). \(\sigma \).	=52	108.6
117	6.5	7.02	865.3	16.7	6.07	-//8	6,2
132	8.5	7.05	868.2	15.37	5.29	-183	4.3
1253	10.0	7.64	869.2	15.34	4.82	-196	3.7
urge Finish Ti	ime 16	1.77		-	-		
otal Volume F		6.06	<u></u>				
nal Depth to		7.44		-			
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			<u>-</u>				
			Sampling Inf	ormation			
ellhead Gas	Measurements:	NA					
ample Collect		1237					
nalytical Suite	•	100 8360	PP ((ylan))				
AQC Sample:		No 1/6	150 01.100				
- GO Oamplo		1.0.16		· · · · · · · · · · · · · · · · · · ·			
otes:	Clev-	, NO GOOR	, NO Sheen			·	



Groundwater Sampling Form Well No<u>. MW-CS ()</u>

_							
Client:	Cheucen	<u> </u>		Well Condition:	600		
Project:	IMGW	Znd 2007		Geologist:	5.1/4	//	
Project No.	500-017-	610		Date:	: 11-12-		
	د		Well Info	ormation			•
Casing	Gallons per						
Diameter	Foot			Total Depth:	59.4	10,	
. 1.5	0.09			Depth to Water:	17.4	5	-
2	0.16			Depth to Product:			
4	0.65	•		Casing Diameter:	211	· ·	
6	1.5			Water Column:	42.04		
8	2.6	Casing Vo	iume (Water Column	x Gallons per foot):			
10	4.1		Purge Volume (3	x Casing Volume):			
			Purge Info	ormation			
Purge Start Ti							
Purge Method							
Flow Rate:	<u> 200-3</u>	100 m//min					
, Time	Volume	pН	Specific	Temperature	DO	ORP	Turbidity
) 	Removed	L-0	Conductivity	2	12/6	mV	1014
11:24	16	7.35	788.2	14.65	9.94	129	732 659.1
11:29	34	7.36	827.0	.14.67	0.93	52	58.0
11:34	4.5	7.34	831.0	15,57	0.50	8	50.4
11:39	6.0	7.32	836.2	15.91	0.36	<u>ک</u> کے ۔۔	40.1
11:44	8.5	7.32	837.4	/5.87	0.25	-69	43.3
11:49	10.5	7.32	840.8	15.49	0.12	-108	45.5
11:54	13.5	7.32	842.4	15.49	0.66	-/34	30.3
11:59	16.5	7.32	842.0	15.42	0.03	1-139	29.8
	<u> </u>			<u></u>			
Purge Finish T	····		· · · · · · · · · · · · · · · · · · ·	•	-		
Total Volume F							
Final Depth to	Water:	17		•			
		•	Sampling Inf	formation			
			oumpining iiii	Ormation.			
Wellhead Gas	Measurements: _	NA					
Sample Collec	tion Time:	11:59					
Analytical Suite	e Collected:	1100' > 6860 3	3 Pb (Glow)				
QAQC Sample	s Collected:	None					
	0 17 1102.	St. 113 dts		2 10 ~	, ,		
Notes: درا جار	(sal 1/2117506	-7W 4/149	C 10:30 CSec	Kungal Keeder Da	unlaced)	·	
1 links rea	Jin Hil Cler	- 14,6 Sens	· <u></u>				



CHEVRON

Client:

Groundwater Sampling Form Well No. MW-26R

Well Condition:

Project:	Zno 2007	IM		Geologist:	Dence L		<u> </u>
Project No.	500-611-6	10		Date:	11/14/0	77	
			Well Info	rmation			
Casing	Gallons per						
Diameter	Foot			Total Depth:			
. 1.5	0.09			Depth to Water:	41.97		•
2	0.16			Depth to Product:			
4	0.65	-		Casing Diameter:			
6	1.5			Water Column:			
88	2.6	Casing Volu	ıme (Water Column	x Gallons per foot):	1.61 9		
10	4.1	•	Purge Volume (3	x Casing Volume):	4.839		· -
					,		
			Purge Info	rmation			
Purge Start Ti	me: <u>[5</u>	10	·				
Purge Method	: <u>ta</u>	J FLOW	<u></u>			•	
Flow Rate:		1325 Lpn	· · · · · · · · · · · · · · · · · · ·				
			Au3/Cir- Specific	ಿ	mu /	mv	NTh
Time	Votume Removed	рН	Specific Conductivity	Temperature	my/L DO	ORP	Turbidity
1517	35 L	7.41	821.8	19.74	6.93	-179	405.7
1520	4.06	7.39	821.4	19.96	6.63	-182	221-9
1525	5,5	7.38	819.6	20.34	0.53	-181	50.7
i530	7.06	7,40	819.9	ZO. 03	0.23	-191	33./
1535	9.06	7.40	820,0	20.10	0-24	-189	24.4
1540	9.5	7.40	821.1	20.40	024	-186	18-1
1545	11.5 €	7.39	821.5	20.54	0.24	- 182	11.7
1550	13.5 C	7.40	822.4	20.42	0.೬೦	-195	8.3
i555	15.°C	7.40	4.558	20.42	0.18	-197	7.0
1600	16.25 L	7.40	822.0	20.41	0.18	-194	5.0
Duves Claich T	ime: /603	œ'		•			
Purge Finish T Total Volume F							
		7					
Final Depth to	water:						
			Sampling Inf	ormation			
Wellhead Gas	Measurements:	A STATE OF					
Sample Collec	tion Time:	1600					
Analytical Suite		VOC, D'S	LEAD				
QAQC Sample		BD1, 1114	07				
Notes:	No onor,	NO SHEEN	, CLEÁR				
					٠.		



Groundwater Sampling Form Well No. 16(1) 95(2)

			well No. pho	-75/	_		
Client: Project:	CHEVRON Zm 200	1 IM		Well Condition: Geologist:	Book Ding L	Λ	
Project No.	500-017-			Date:	11/14/2	00')	
. rojour.		0.0			**/*/		
Casing	Gallons per		Well Info	rmation			
Diameter	Foot			Total Depth	104.6		
. 1.5	0.09			Depth to Water:		4	····
2	0.16			Depth to Product:			
. 4	0.65			Casing Diameter:	2//		
6	1.5			Water Column:			
8	2.6	Casing Vo	olume (Water Column	x Gallons per foot):	3.90c		
10	4.1		Purge Volume (3	x Casing Volume):	<u> 11.70 g</u>		
Purge Start Ti Purge Method Flow Rate:	1: <u>11</u> 11						
Time	Volume Removed	рН	ルソク(か Specific Conductivity	کر Temperature	mg/L DO	μ√ ORP	Turbidity
1009	3.0	7.0	1435	14.80	9.30	-97	39
1014	4.25	6.99	1436	15,08	9,15	-99	24.2
1019	5.75	6.99	1442	15,20	9,01	-93	19.9
1024	6.75	6.98	1496	15.43	8-86	-86	20.0
1029	7.50	6,99	1447	15.52	8.79	-79	21.5
1034	8.25	6.99	1449	1552	8.73	- 73	5.15
							- -
							
							-
Purge Finish T Total Volume F Final Depth to	Purged: 9.5	Law .					
			Sampling Inf	ormation	•		
Wellhead Gas Sample Collect Analytical Suite QAQC Sample	e Collected:	1035 VOC'S D NONE	CAPD				
Notes:	NO osor		EN OLEAR				



Groundwater Sampling Form Well No. <u>Mい-%</u>らs

Client:	CHEVRON			Well Condition:	<u>G000</u>			
Project:	2nd 2007	IM		Geologist:	OUG-LA-			
Project No.	500-017-01	O		Date:	11/14/6	}		
			Well Info	rmalian				
Casing	Gallons per		weit into	rmation				
Diameter	Foot			Total Depth:	82.6"			
1.5	0.09			Depth to Water:	80.92			
2	0.16			Depth to Product:	NP			
4	0.65			Casing Diameter:	2"			
6	1.5			Water Column:	1.68			
8	2.6	Casing Volu	me (Water Column	x Gallons per foot):).27 _G	·		
10	4.1		Purge Volume (3	x Casing Volume):	0.81 9			
					,			
			Purge Info	rmation				
Purge Start Ti	me: <u>139</u>							
Purge Method	: Bai	LING (3x Va	cume)					
Flow Rate:	- Single-		-					
						T	·	
Time	Volume Removed	рН	Specific Conductivity	Temperature	DO	ORP	Turbidity	
<i>9</i>	//eilloved		Conductivity					
								
	0 / 10 =				VALUE TO THE PARTY OF THE PARTY			
	A WAR	R 700 4	w Fon Aur	IP USE/LOW	FLOU			
_								
					- <u>-</u> -			
						·		
	· · · · · · · · · · · · · · · · · · ·						1	
							 	
<u></u>		<u> </u>					L	
Purge Finish Ti	ime: <u>1423</u>			•	-			
Total Volume F	Purged: Just of	LESS THAN I	SALLOS					
Final Depth to	Water: <u>87.50</u>	<u> </u>		•				
		•		<i>y</i>				
			Sampling Info	ormation				
Mallhand Can	Measurements:	. la4						
	•	1420						
Sample Collect	•	1430	(- A -					
Analytical Suite	•		CEAN					
QAQC Sample:	s Collected:	None						
Notes:	Tuch	b No oder	No sheen					
-		- NO ODER	1					
·								



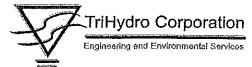
CHERRON

Client:

Groundwater Sampling Form Well No. かいつえの

Well Condition:

Project:	ZNO 200	7 100		Geologist:	DONGL	(
Project No.	<u>500-0000</u>	0		Date:	11/15/0)7	
			Well Info	rmation			
Casing	Gallons per		TTON INTO	THIGHOH			
Diameter	Foot			Total Depth	46.90		
1.5	0.09			Depth to Water	4		-
2	0.16			Depth to Product			
4	0.65	-		Casing Diameter:			
6	1.5			Water Column:			
8	2.6	Casing Vo	ume (Water Column	x Gallons per foot):			
10	4.1		Purge Volume (3	x Casing Volume):			
	_		Purge Info	rmation	•		
Purge Start Ti	me: <u>1550</u>)					
Purge Method		FLOW					
Flow Rate:	<u> </u>	<u>,40</u>					
		T	MS/CIN Specific	T 6.	46.77	MU	NTU
Time	Volume Removed	рН	Specific Conductivity	Temperature	M9/L DO	ORP	Turbidity
1600	4.06	7.16	820.2	16.69	0.27	-288	244.4
1605	6.756	7-18	818.5	16.84	6.13	-308	115.7
1610	8.56	7.19	818-1	16.84	0.09	-315	75.2
1615	10.06	7.19	817.9	16.97	6.09	-308	56.2
1620	12.56	7.20	817.2	17.07	0.16	-258	35.9
1625	14.0	7.20	817.8	12.13	25.0	-231	31.0
1630	16.06	7.20	818.1	17.00	0.23	-234	_[
						ļ	
<u></u>				<u> </u>	<u> </u>		
Purge Finish T	ime: 163	35		-	-		
Total Volume F		٥٢					
Final Depth to		41					
·		-					
			Sampling Inf	ormation			
Wellhead Gas	Measurements:	- Managara					
Sample Collect		1630					
Analytical Suite		1. 1	S LEAD	 	-		
QAQC Sample		NONE	/ 0010				
m - merculate				··· · · · · · · · · · · · · · · · · ·			
Notes:	1 RON	SMINING.	GOING TO CLE	AR NO ORIN	- SHEEN		·
				<u>'</u>			
					٠.		
							



Groundwater Sampling Form Well No. Μω-100,

<i>/</i>	A 14						
Client:	_CHEVRON			Well Condition:	_ ৩০০০		
Project:	ZNO 200			Geologist:	Deno-c		
Project No.	500-017-1	2/16		Date:	11/16/0	ר	
	<u> </u>		Well Info	ormation			
Casing Diameter	Gallons per Foot			Total Depth;	86.03	,	
1.5	0.09			Depth to Water:	80.901		
2	0.16			Depth to Product:	1 N/	<u> </u>	
4	0.65			Casing Diameter:	Z"		
6	1.5			Water Column:	5.13'		
8	2.6	Casing Vo	lume (Water Column	x Gallons per foot):	0.829		· · · · · · · · · · · · · · · · · · ·
10	4.1			x Casing Volume):	2.46 9		
					7		
	17.0		Purge Info	ormation			
Purge Start Ti			<u> </u>				
Purge Method		FLOU					
Flow Rate:		30 4/2					
Time	Volume	рН	Specific	Tompositure	M9/C DO	mV	NTH
1 (11)0	Removed		Conductivity	Temperature	DO	ORP	Turbidity
1215	2.0 L	6.97	1250	14.41	0.72	-135	657.1
1226	4,5	59.6	1179	15.45	0.78	-132	450.6
1225	6.02	6.97	1193	15.20	0.51	-151	183.5
1230	7.62	7.01	1204	15.69	0.43	-159	141.1
1235	8.25	7.03	105/	16.10	0-47	-146	94.3
1240	10.0 L	7.05	1177	16.73	0.71	-145	5,18
1245	11.0 L	7,06	1163	16.61	1.0	-161	79.8
1250	12.0 L	7-07	1144	16.16	1.7.1	-/58	72.5
1305	16.° Z 16.75 C	7.08	1057	16.40	<u> 7.47</u>	-117	96.4
1303	16,10	7,0%	1048	16.28	2.69	-112	1.88
Purge Finish Ti	me:	5			•		
otal Volume P							
inal Depth to V	Vater: 80 -	२०		• •			
							
			Sampling Inf	ormation			
Vellhead Gas N	/leasurements:	4~					
ample Collecti	-	1310				•	
nalytical Suite	-	····	, CEAN				
AQC Samples		NONE					
•	-			······································			
lotes:	GOING CLEAR	L - TURBIOIT	Y SENSON MICH	T HAWE BEEN	COATEO		



Groundwater Sampling Form Well No. <u>Mみ~/3て</u>

CCELTRALISM =			•						
Client:	CHEVRON			Well Condition:	Good				
Project:	2 <u>00</u> 2007	SAIM GRO	INOWATER	Geologist:	Derce	Am			
Project No.	500-017-0	010		Date:	11/19/2	.OU)			
			Well Info	rmation	,				
Casing	Gallons per		1101/11/10			;			
Diameter	Foot			Total Depth:	44.55	,			
1.5	0.09			Depth to Water:	37.75	<u> </u>			
2	0.16			Depth to Product:	2"				
4									
6	1.5 Water Column: 6.8								
8	2.6	Casing Vol	1.09 G						
10	4.1 Purge Volume (3 x Casing Volume): 3.27 g (12,4 L)								
					•				
			Purge Info	ormation					
Purge Start Ti	ime: 14.	30	_						
Purge Method	t: La	J FLOW							
Flow Rate:		0.22 cpm							
	T	·	us/cm	т в		1	1 0		
Time	Volume	pH	Specific	Temperature	19/C	ORP	Turbidity		
Time	Removed	Pi'	Conductivity	Temperature	DQ	I OKF	Turblaity		
1455	5,06	7.26	886.8	17-49	2.68	-123	73.1		
1503	8, 3 €	7.27	828.7	17.58	2.13	-115	15.2		
1510	9.06	7.29	876.6	17.45	2.06	-114	8-6		
1515	/0.° C	7.29	877.2	17.35	2.05	-112	4.9		
					10 T				
		<u> </u>							
			ļ						
						 			
		<u> </u>				<u> </u>			
Purge Finish 1	Time: <u>/52 c</u>)							
Total Volume	Purged: <u>12 ८</u>	_							
Final Depth to	Water: 37.7	5'							
			Sampling In	formation					
Mollhood Coo	Measurements:	cimila	. •						
Sample Collect		1515							
Analytical Suit		1313 100's DIS	LEAD						
QAQC Sample		NOYE NOS' DIS	o ceno						
whice campit	es Collecteu.	1.0h@		<u>.</u>					
Notes:	TURBIO T	o cuerar,	NO ODOR	NO SHEEN					



Groundwater Sampling Form Well No. <u>MW-13</u>牛

Client:	CHEVRON)		Well Condition:	GOOP			
Project:	240 2007 .		WATER	Geologist:	Oxio 4	-A		
Project No.	500-017-01		77.7.0.0	Date:	11/19/2			
•					1.71.17			
			Weil Info	rmation				
Casing	Gallons per				111 = 1			
Diameter	Foot			Total Depth:	44.51			
1.5	0.09			Depth to Water:	37.781			
2	0.16			Depth to Product:	ALP			
4	0.65			Casing Diameter:	2"			
6	1.5			Water Column:	6.72'			
8	2.6	Casing Volu	me (Water Column	x Gallons per foot):	1.089			
10	4.1		Purge Volume (3	x Casing Volume):	3.24 9	(12.34)		
			Divers luf-					
Purge Start Ti	me: /Z:	7.7	Purge Info	rmation				
-			·					
Purge Method	: <u> </u>	w FLOW						
Flow Rate:		275 L/min				,		
			MS/Cm Specific	oc I	Ma/C	I mV	NTU	
Time	Volume Removed	pН		Temperature	1.16°	ORP	Turbidity	
		•	Conductivity	<u> </u>			7 4.2.4	
1242	4,52	7.25	835.3	17.18	2.38	-43	508.4	
1247	6.02	7.31	840.2	17.23	1.40	-105	3/2.0	
1252	7.0L	7.31	834.2	17.39	1.22	-115	220.8	
1257	8.٥٢	7.32	837.0	17.98	1110	-121	163.8	
1302	9,06	7.32	832-2	17-81	0.89	-/30	84.9	
1307	10.00	7.33	9.858	17.62	6.81	-133	69.0	
1312	11.00	7.34	827.0	17.65	0.87	-135	62.0	
					• "			
F1 F2 7	1:2 / @	,		l		<u>. </u>		
Purge Finish T								
Total Volume F								
Final Depth to	Water: <u>37.7</u>	8	•					
			Sampling Int	ormation				
Wellhead Gas	Measurements:	*elistica*						
Sample Collec	tion Time:	1315						
Analytical Suite			. LEAD					
QAQC Sample		Nohe						
Notes:	TURBID AT	SMRT - CLE	AR YOWARDS .	SAMPLE TIME,	NO OPER ,	NO SHEEN		
								



Groundwater Sampling Form Well No. <u>Mw-131</u>

Client:	CHEVRON	ł		Well Condition:	NEW					
Project:		AIM GRUNDL	JATEK	Geologist:	Durbe	-				
Project No.	500-017-0		***************************************	Date:	11/20/0)				
•										
			Well Info	rmation						
Casing	Gallons per				112 121					
Diameter	Foot		Total Depth: 43.62							
1.5	0.09			Depth to Water:	35,52					
2	0.16			Depth to Product:	NP 8-10- 2					
4	0.65			Casing Diameter:	8-10- 3	> // 				
6	1.5			Water Column:	8.10'					
8	2.6	Casing Volu	ne (Water Column	x Gallons per foot):	1.39					
10	4.1		Purge Volume (3	x Casing Volume):	3.9 g (14.86)				
					, .					
			Purge Info	rmation						
Purge Start Ti	me: 1430	1	raige iiiio	illiation						
Purge Method	***************************************	FLOU								
Flow Rate:	· <u> </u>	0,37 Cpm	4							
Flow Rate.		1137 Cpm				,				
	Volume	1	Specific	, <u>,</u> ,	mg/C	MV	NTU			
Time	Removed	pН	Conductivity	Temperature	mg/C	ORP	Turbidity			
1.10				100	- O -					
1435	1,756	7.26	710.7	17.30	0.98	-141	4255			
1440	4.06	7,22	711.3	17.26	<u> </u>	~ 565	78.6			
1445	8.0 L	7.14	719.1	17.21	<u> </u>	-279	78.9			
1450	8.00	7.13	724,0	17.29	6.03	ררש -	19.4			
1455	9,75L	7.12	722,8	17.29	0.63	-283	13.5			
1500	11.506	7.12	727.2	17.24	0.04	- 287	9.3			
1505	13.06	7.11	727.2	17.28	0.04	- 286	5.1			
		-								
Purge Finish T	ime: /5/0)								
Total Volume F		0 [
Final Depth to	· —	52'								
			Sampling In	formation						
Wellhead Gas	Measurements:									
Sample Collec		1505								
Analytical Suite		VOC'S DIS	CEAD							
QAQC Sample		None								
Notes:	NO ODOR	, NO SHEET	V							
	_	_								



Groundwater Sampling Form Well No. Mw-35

CCRPORATION					•			
Client:	CHEVRON			Well Condition:	Good	VO PAO		
Project:	ZM 2007 5		<u>IDWATER</u>	Geologist:	Doug Cam			
Project No.	<u>500-017-0</u>	<u>ي ۱ ر </u>		Date:	11/20/0	<u> </u>		
			Well Infor	mation				
Casing Diameter	Gallons per Foot			Total Depth:	450 12	∕ ToAMEMU BHUGE	CASPAC	
1.5	0.09			Depth to Water:	44.04	@ ItiNúE		
2	0.16			Depth to Product:	NP		·	
4	0.65			Casing Diameter:	2"			
6				=	8,131			
ļ	1.5	Cooler w Mole		Water Column:				
8	2.6	Casing void	me (Water Column		1.30 9	7,40		
10	4.1		Purge Volume (3)	x Casing Volume):	3.90 g	(14.8 L)		
Purge Start Ti Purge Method Flow Rate:	: Lon	5 , FLOW 0.36 cpm	Purge Info	rmation				
Time	Volume Removed	рН	Specific Conductivity	Temperature	mg/L	ORP	Turbidity	
1245	4.50		-		422-	_	**	
1250	5.5L	7.40	922.6	17.62	2.27	-140	293.1	
1255	7.256	7.33	935.7	17.94	1.80	-144	98.7	
130-0	9.06	7.32	940.0	17.98	1.62	-146	56.9	
1305	10.25 L	7.31	935.5	17.96	1.49	-145	295	
1310	12.25	7.31	936.1	17.71	1.28	-145	13.7	
1315	14.75 6	7.31	937.5	17, 59	1.25	-146		
1320	16.25	7.29	942.5	17.72	1.22	-144	12.4	
			1	17: 7-	7.00	1 1 7	3,,	
Purge Finish T Total Volume I Final Depth to	Purged: 22.	٥٧			in the second se			
			Sampling In	formation	s'			
Wellhead Gas	Measurements:			<u>.</u>				
Sample Collec	tion Time:	1325						
Analytical Suit	e Collected:	VOC'S, D	15 LEAD					
QAQC Sample	es Collected:	MW-35 MS	/MSD , 112007	T				
Notes:	Gowa	CLEAR, N	o oour, no	SITCEN				



Groundwater Sampling Form Well No. <u>MW-1</u>3 ア

	Auman I				4						
Client:	CHEVRON			Well Condition:	<u> </u>						
Project:		SAIM GROWN	NOWATER .	Geologist:	DONG- CA	<u> </u>					
Project No.	500-017	-010		Date:	11/20/01	!					
			Well Info	rmation	•						
Casing	Gallons per		77011 11113	***************************************		EDAM STEEL	CASIAK.				
Diameter	Foot			Total Depth:	51.42'	FROM STEEL . @ 1-HANGE					
1.5	0.09	Depth to Water: 44. 78 '									
2	0.16										
4	0.65										
6	1.5			Water Column:	6.64						
8	2.6	Casing Volu	me (Water Column	x Gallons per foot):	1.06 9						
10	4.1		Purge Volume (3	x Casing Volume):	3.18 :	(12.054)					
					′		•				
			Purge Info	ormation							
Purge Start Ti	me:/07	5	y								
Purge Method		J Feor									
Flow Rate:		0.46 cpm									
			70/		,						
T:	Volume	1	Specific	- °C	Mg/L	mV	NAM				
Time	Removed	Hq	Conductivity	Temperature	400	ORP	Turbidity				
1050	1415L	7.40	956.6	16.39	3.94	-83	890.2				
1055	16,756	7.40	963.7	16.80	3.77	-92	717.9				
1100	18.25	7.40	963.8	16.88	3.71	-92	121.7				
1105	20,° 4	7.41	961.7	16.98	3.53	-94	50.4				
146	21.56	7.41	961.4	17.05	3,44	-94	27.4				
1115	23.00	7.42	960.4	17.09	3.41	-94	25.6				
					-						
Purge Finish T	ime: <u>//Z</u>	ر ا									
Total Volume F											
Final Depth to											
	- 47										
			Sampling In	formation							
Wellhead Gas	Measurements:	47 Millions									
Sample Collect	tion Time:	1120	<u></u>								
Analytical Suite	Collected:	VOC'S DIS	LEAD	· · · · · · · · · · · · · · · · · · ·							
QAQC Sample		NONE		- () (samu-same							
						•					
Notes:	VERY T	ukisio , No	000 NO	SHEEN							
		-									



Groundwater Sampling Form Well No<u>.かん-//4</u>

Client:	CHEVRON)		Well Condition:	6000		
Project:	2ND 200			Geologist:	Dunce	A_	
Project No.	300-017-	010		Date:	11/27/0		
			Well Info	rmation	. ,		
Casing Diameter	Gallons per Foot			Total Depth:	82.25'	84.2	
1.5	0.09			Depth to Water:	79.04	Oric	
2	0.16			Depth to Product:	NP		
4	0.10			Casing Diameter:	2"	 	
6	1.5			Water Column:	3.21	5.16	
8	2.6	Casing Volu	ma (Mater Column	x Gallons per foot):	0519	Q 83 "	
10	4.1	Casing void		x Casing Volume):	1.5 9 1	=11 S	5 100.
10	4,1		ruige volume (s	x Casing volume);	1.3 9		5g (9.5c
			Purge Info	ormation			
Purge Start Tir	me: 13	i 5	r argo mic	71111411011			
Purge Method		J FCOW					
Flow Rate:		5,35 cm					
		J120 CATA				1	
Tíme	Volume Removed	рН	Specific Conductivity	OF/C Temperature	Mg/€ B0	ທ√ ORP	Turbidity
1325	54	6.92	57534		2.82	-112	397.8
1330	72	58.9	1373	160.36	2.54	- 58	1941
1335	8.75C	6.79	13.86	60.38	2.57	-9z	432.6
1340	10.00	6.78	1680	16.10	7.61	- 85	220.1
1345	i1.75c	6.77	1675	16.82	7.57	-77	88.1
1350	12.75 L	6.79	1666	16.13	2.57	- 79	47.6
1355	14.00	6.79	1674	16.48	2.59	- 73	45.1
Purge Finish T	ime: 140	ซ					
Total Volume F							
Final Depth to	-						
2 op to		- 					
			Sampling In	formation	·		
Wellhead Gas	Measurements:	_ NM					
Sample Collec	tion Time:	1400					
Analytical Suite	e Collected:		14 LEAD				
QAQC Sample		None					
Notes:	TURBIU	NO 000	No s4eeu	,			
•							
	& Conouci	nuity SETTIN	KS WRONG 11	1 DATA COGGE	R AT STAR	T - ALSO"	Temp.



Groundwater Sampling Form Well No. <u>MW-3つ</u>

Client:	CHORON			Well Condition:	රාගව			
Project:	ZNO 7-00) 100	,	Geologist:	DUNGLA	· · · · · · · · · · · · · · · · · · ·		
Project No.	500-017-0							
r rojour rru.	00000170			Date.	11/2/10	<u> </u>		
			Well Info	rmation				
Casing	Gallons per				30 4 4 1			
Diameter	Foot			Total Depth:	30.451			
1.5	0.09			Depth to Water:	25.891			
2	0.16			Depth to Product:	NP Z"		· · · · · · · · · · · · · · · · · · ·	
4	0.65			Casing Diameter:				
6	1.5			Water Column:	4.57'			
8	2.6	Casing Volu		x Gallons per foot):	0.73 9			
10	4.1		Purge Volume (3)	x Casing Volume):	2.29	(832)		
			Purge Info	rmation				
Purge Start Ti	me: <u>103</u>	20						
Purge Method	: <u>La</u>	FLOW						
Flow Rate:		5,20 cpm						
		<u>, </u>	112600		·			
Time	Volume	nLi	Specific	Temperature	M9/C DO	MV	NTH	
i iiile	Removed	pН	Conductivity	remperature	ьо	ORP	Turbidity	
1030	4.06	6.75	1209	15.22	409 41	208	1124	
1035	5.25 6	6.85	1208	<i>is</i> .38	1,60 44	<i>i</i> 17	121.6	
1040	フ. ن	6.83	1224	14.70	368	شد	60.3	
	SEMSONS	FULED - MI	CFUNCTIONING					
			G & SAMPLE	1				
Purge Finish T	ime:/115							
Total Volume F								
Final Depth to								
i mai Dopin to	Water	80						
			Sampling Inf	formation				
Wellhead Gas	Measurements:	MM						
Sample Collect		1110		······································				
Analytical Suite		- ,	LEMO					
QAQC Sample		10×E						
p to								
Notes:								
			O CLEAN LINE	of deads				
77 CLEI	WED DO MEN	WRRANE - Fan	しぎり					

A



Groundwater Sampling Form Well No. MW-945

Client:	CHEVRON			Well Condition:	రారా						
Project:	COOL UNZ	· · · · · · · · · · · · · · · · · · ·		Geologist:	Dincel	1	-				
Project No.	500-017-			Date:	11/27/						
			Well Info	rmation	,						
Casing Diameter	Gallons per Foot			Total Depth:	72.95	•					
1.5	0.09			Depth to Water:	67.36	/					
2	0.16			Depth to Product:	<u> </u>						
4	0.65			Casing Diameter:	NP Z"						
6	1.5			Water Column:	5.09						
8	2.6	Casing Volu	me Mater Column	x Gallons per foot):	0.89						
10	4.1	Casing Void			7.49	(9.12)					
	l.	4.1 Purge Volume (3 x Casing Volume): 7.4 9 (9.1 L)									
	1.6		Purge Info	rmation							
Purge Start Ti	me: <u>j44</u>	50									
Purge Method	: Lor	1 Febru									
Flow Rate:		. 23 Lp_									
		<u> </u>	u.S/cm	<u> </u>		1	Mry				
Time	Volume Removed	рН	Specific Conductivity	Temperature	mg/C DO	/n√ ORP	Turbidity				
1505	3.56	7.03	1095	16.14	0.47	-220	333,1				
1510	4.5	6.94	1116	15.09	0.21	-240	150.2				
1515	5 75	6.95	1105	1671	0.29	-518	137.5				
1520	6.5 C	6.94	1087	16 125	0.26	-271	121.4				
1525	8.00	6.92	1090	17.61	0.24	-225	189.6				
Purge Finish T	ime:/ <u>\$3</u> .	<u> </u>									
Total Volume F	Purged:										
Final Depth to	Water: <u>67،3</u>	6									
			Sampling In	formation							
Wellhead Gas	Measurements:	NM									
Sample Collec	tion Time:	1530									
Analytical Suite	e Collected:	(. x .	LEAP								
, QAQC Sample		NONE		· · · · · · · · · · · · · · · · · · ·							
Notes:	INKBIO!	r, senson	NOT FUNCTION	NI PROPERLY	WATER C	LEAR, SLIGH	F ODUR				



Groundwater Sampling Form Well No. <u>MW-48p</u>

Client:	CHEVRON			Well Condition:	OK-		
Project:	2ND 2007) <i>IM</i>		Geologist:	Dona LA 11/28/2007		
Project No.	500-017-0	SIQ		Date:	11/28/2	<u>00)</u>	
			Well Infor	mation			
Casing Diameter	Gallons per Foot			Total Depth:	49,85.		
1.5	0.09			Depth to Water:	16.69		
2	0.16			Depth to Product:	NP		
4	0.65			Casing Diameter:	NP Z"		
6	1.5			Water Column:	33.16'		
8	2.6	Casing Volun	ne (Water Column :	x Gallons per foot):	5.31 921	į.	
10	4.1	-	Purge Volume (3	Casing Volume):	15.935		76
	مرودي		Purge Info	rmation			
Purge Start Ti	me: /30) 2					
Purge Method	: <u>Lu</u>	FLUN					
Flow Rate:		FCW). 25 cpm					
	6		Specific	°C	Ma/L	mV	NTU
Time	Volume Removed	pН	Specific Conductivity	Temperature	M9/2 DO	ORP	Turbidity
1310	1.56		TOT MEA	SURED -			
1315	2.756	7.28	777.7	19.79	0.47	-71	166.5
1320	3.56	7.34	803.9	19.31	0.28	~15g	118.4
1325	4.756	7.33	814.8	Zo.35	0.21	-181	73.6
1330	6.0 -	7.35	807.4	20.50	0.17	-194	56.9
1335	7.25L	7.35	8/0,0	20.75	0.16	-198	38.7
1340	8.75L	7.37	802.7	20-61	0.19	-194	26.4
1345	10.06	7.39	860,9	20.10	0.20	-194	73.8
Purge Finish T	ime: <u>j 355</u>	<u> </u>					
Total Volume							
Final Depth to	Water: <u>/6.€</u>	4'					
			Sampling In	formation			
Wellhead Gas	Measurements:	-					
Sample Collec		1350					
Analytical Suit			S LEAD				
QAQC Sample		BOZ, 1128					
Notes:	NO 000R	L NO SHE	EN MOSTER	CLEAR - LARC	FLECKS	INSAMPLE	



Groundwater Sampling Form Well No. ∕∖∖W-√W 485

Client:	CHEVRON	·		Well Condition:	6000						
Project:	240 500) IM		Geologist:	Done M- 11/28/07						
Project No.	500-017-0	510		Date:	11/28/0	7					
			Well Info	rmation	•						
Casing	Gallons per		VVC II 111101	matton							
Diameter	Foot			Total Depth:	CACIPS .	27,35					
1.5	0.09		Depth to Water: 17-36								
2	0.16			Depth to Product:	NP Z"						
4	0.65			Casing Diameter:	2"						
6	1.5			Water Column:	9.99						
8	2.6	Casing Volu	me (Water Column	x Gallons per foot):	1.6 g 4.8 g (
10	4.1		Purge Volume (3	x Casing Volume):	4.8'c (18,2 2					
					ŗ						
	3 <i>f</i> .		Purge Info	rmation							
Purge Start Tir	me: <u>141</u>	5									
Purge Method	: Lot	s Feor									
Flow Rate:		0.34 cpm									
		<u> </u>	115/0-	ا ٥ ر	mall	I mV	NTU				
Time	Volume Removed	рН	Specific Conductivity	Temperature	mg/L DO	ORP	Turbidity				
1426	401	6.90	752.5								
	5.06	6.89	841.8	19.80	<i>6.</i> 63	-769	4./				
1436 1435	6.756	6.88	8 4 3 <i>5</i>	20.04	0.03	-270	3, 2				
		<u> </u>									
			<u> </u>	<u> </u>							
Purge Finish T		15									
Total Volume I	Purged: 3.4) (·								
Final Depth to	Water: 17. 3	36"									
			Sampling In	formation							
Wellhead Gas	Measurements:	especial control of the control of t									
Sample Collec		1440		 							
Analytical Suit)15 LEAD								
QAQC Sample		NONE									
Notes:	ODOR.		IBING DISCOL	ORED UPON	REMOUAL @	WATER C	NE_				



Groundwater Sampling Form Well No<u>. M以~48</u>፲

Client:	CHEVRON			Well Condition:	Good			
Project:	ZND 2007			Geologist:	11/28	}~		
Project No.	500-017-	610		Date:	<u>11/08</u>	.		
			Well Infor	mation				
Casing Diameter	Gallons per Foot			Total Depth:	39.95			
1.5	0.09			Depth to Water:	17.32			
2	0.16			Depth to Product:	NP			
4	0.65			Casing Diameter:	7"			
6	1.5			Water Column:	ZZ. 63'			
8	2.6	Casing Volum	ne (Water Column :	x Gallons per foot):	3.629	(13.7 L)		
10	4.1		Purge Volume (3:	x Casing Volume):	10.86 9	(41.21)		
					,			
			Purge Info	rmation				
Purge Start Tir	ne: <u>152</u>	25						
Purge Method	Low	FLOW						
Flow Rate:	<u></u>	0.25 cpm						
		,	esc/Lm		. Is		1 . 4-4	
Time	Volume Removed	рН	Specific Conductivity	o Temperature	mg/C	ORP	NTA Turbidity	
1535	ے ۵۔2	7,27	857.4	19.16	0,49	-134	230.8	
1540	3.256	7.37	8:28·8	19.03	0.14	-146	70.9	
1545	5.00	7.39	858.6	20.33	0.11	-149	45.9	
1550	6.25	7.42	859.1	19.63	0.08	-185	20.8	
1555	7.75	744	863.1	19,58	0.09	-250	13.4	
1600	90L	7.45	859.6	19.73	6.09	-223	104	
1605	10.252	7.45	863.0	19.68	0.08	-240	7.3	
1610	11.5 L	7.45	865,9	19.83	0,08	- 250	5.72	
Purge Finish T	ime: 1615							
Total Volume I	ourged: /2.4	٥ (
Final Depth to	Water: 17.3	٤ *						
	, ,,		Sampling Inf	formation				
Mollhood Con	Measurements:	**************************************						
Sample Collec		1610						
•		VOC's , DIS	(PAO					
Analytical Suit			CCIII		•			
QAQC Sample	s Collected:	NONE						
Notes:	No oper	NO SHEEN	<u> </u>					



Groundwater Sampling Form Well No. <u>MW~128</u>

Client:	CHEVRON			Well Condition: GOOD				
Project:	2ND 2007	1M		Geologist:	Dance	~		
Project No.	500-017-0			Date:	Dans 11/29/07	,		
			Well Infor	mation				
Casing	Gallons per			•	34 G.	1		
Diameter	Foot			Total Depth:	74.91			
1.5	0.09			Depth to Water:	68.16'			
2	0.16			Depth to Product:	2" 6,75'			
4	0.65			Casing Diameter:	2"			
6	1.5			Water Column:	6, 75 '			
8	2.6	Casing Volur	ne (Water Column	x Gallons per foot):	1.08 9	(4.1 L)	•	
10	4.1		Purge Volume (3	x Casing Volume):	12.3 91	(46.6 L)	<u> </u>	
		,	Purge Info	rmation				
Purge Start Tir								
Purge Method	: <u>Luı</u>	FLOW						
Flow Rate:).37 Lpm				i		
	Volume		lus/cm Specific	ان Temperature	Mg/C DO	MV	NT4	
Time	Removed	pН	Conductivity	reinperature	DO	ORP	Turbidity	
1115	4.00	6.90	1072	16.16	0.74	-12C	10431	
1120	6.02	6.89	1070	16.75	6.16	-172	419.4	
1125	7.54	688	1677	16.18	0.14	-199	183.9	
1130	9.0	6.87	1073	1667	0.13	-198	125.3	
1135	11.0 6	6.86	1069	17.23	6.17	-204	5/.2	
1140	12.25	6.86	1060	17.16	0.12	805-	35.4	
1145	14.75	6.86	1671	17.26	6.11	-213	/8.8	
1150	16.75	6.87	1071	וסס.רו	0.13	- 215	16.8	
						<u> </u>	1	
Purge Finish T	ime: //55	<u> </u>						
Total Volume I	Purged: 18.	•						
Final Depth to	Water: <u>68./</u>	6						
			Sampling In	formation				
Wellhead Gas	Measurements:	WM						
Sample Collec		1150						
Analytical Suit		100's DIS (· eAA					
QAQC Sample		NONE	<u>seng</u>					
	į		Ah - c	h. 64				
Notes:	Very "	Turbio, Suc	nt oder, e	to sacen				
								



Groundwater Sampling Form Well No. <u>Mω・//</u>5力

Client:	CHEVRON			Well Condition:	Goods				
Project:	200 2007 IM			Geologist:		Dont CAn			
Project No.	500-017-	-010		Date:	11/29/0				
	Γ		Well Info	rmation					
Casing Diameter	Gallons per Foot			Total Depth:	83.30				
1.5	0.09			Depth to Water:	44.31				
2	0.16			NP.					
4	0.65			2"					
6	1.5			39 ′					
8	2.6	Water Column: Casing Volume (Water Column x Gallons per foot):			6,259	(23.76)			
10	4.1	outling void		x Casing Volume):	18,750				
			· argo volamo (o	x odding volunio).	10,729	(//)			
	13	35	Purge Info	rmation					
Purge Start Ti		u Fim							
Purge Method	:								
Flow Rate:		0.34 cpm							
	Volume		us/cm	oc.	mg/L	T ~V	NTU		
Time	Removed	pН	Specific Conductivity	Temperature	ďо	ORP	Turbidity		
12.5		100		1/1 -		1			
1350	6,54	6.87	1158	14.58	().56	-159	380.7		
1355	800	6.94	1148	/5.07	0.27	-513	180.9		
1400	9,25	6.97	1149	14.79	0.18	-229	1.58		
1405	10.75	699	1145	<u> </u>	0.15	- 237	54.5		
1410	1200	7.00	1143	14.89	0.11	-263	17.4		
1415	13.50	7.61	1146	14.34	0.11	- 256	15.3		
						 			
						<u> </u>			
						 			
		<u> </u>		1		<u> </u>			
Purge Finish T	ime: <u>/42</u> :	5							
Total Volume I	ourged:15~6	, _د							
Final Depth to	Water: <u>44، 3</u>	1							
			Sampling In	formation					
			Sampling in	omatton					
Wellhead Gas	Measurements:								
Sample Collec	tion Time:	1420							
Analytical Suite	e Collected:	voc's Dis	CEAD						
QAQC Sample	s Collected:	Neve							
Notes:	CLEAR,	NO ODOM,	NO SHEEN						
140(69,	Cooms	MO ODOLC!	3 // CE~		.				

øH



Groundwater Sampling Form

Well No. /	NW-1155
------------	---------

Client:	CHEVRON			Well Condition:	6000				
Project:	240 2007 IM			Geologist:	Dance L	A~~			
Project No.	500-017-			Date:	11/29/0				
			Well Info	rmation	·				
Casing	Gallons per		Well Illio	imation					
Diameter	Foot			Total Depth:	51.75				
1.5	0.09			Depth to Water:	44.24				
2	0.16		Depth to Product: \sqrt{P}						
4	0.65			Casing Diameter:	2"				
6	1.5			Water Column:	7.51'				
8	2.6	Casing Volu	ne (Water Column	x Gallons per foot):	1.20 9	(4.5L)			
10	4.1			x Casing Volume):	3.6 9	(13.6 L)			
			,	,					
			Purge Info	ermation					
Purge Start Ti	ime: /4.3	9	· argo mic						
Purge Method		I FULL							
Flow Rate:	+	0.32 Lpm							
			4						
Time	Volume Removed	pН	Specific Conductivity	Temperature	mg/2	<i>MV</i> ORP	ルガ Turbidity		
1445	2,00	7.17	925.7	/5.33	1.43	-249	70.2		
1456	3,5 2	7.15	927.9	15.21	2.46	-284	41.3		
1455	4.756	7.12	938.4	15,15	3.73	-775	16.6		
1500	6.75	7:10	932.9	15.50	4.39	-269	9.7		
1505	8 25	7.10	932.2	15.23	4.74	-274	75		
						<u> </u>			
Purge Finish 1	Time: 15/3	5	•						
Total Volume			18.11						
Final Depth to									
, ,,,,,,,,									
			Sampling In	formation					
Wellhead Gas	Measurements:								
Sample Collec	ction Time:	1510							
Analytical Suif	te Collected:	MOC'S DO	S CEM						
QAQC Sample	es Collected:	NOWE							
31-4	Club.		50 mm						
Notes:	Sixer 6	oson, No	, SHEEN						



Groundwater Sampling Form Well No<u>. Mu - 81</u>ム

Client:	CHEVRON			Well Condition:	Goog			
Project:	Zro 2007	2007 IA Geologis			Den CA			
Project No.	500-00-			Date:	11/30/0			
			Well Info	rmation				
Casing	Gallons per							
Diameter	Foot			Total Depth:	94,951	•		
1.5	0.09			Depth to Water:	14.56	7		
2	0.16		·	Depth to Product:				
4	0.65			Casing Diameter:	2"			
6	1.5			Water Column:	55.391			
8	2.6	Casing Volu	me (Water Column	x Gallons per foot):	8.8698	1 (32.86)	
10	4.1		Purge Volume (3	x Casing Volume):		26.6 gal (98.4L)		
	7							
			Purge Info	rmation				
Purge Start Tir	ne: <u>i07</u>	2.7						
Purge Method:	<u>Lu</u>	u Fcchu						
Flow Rate:		5,2 cpm						
		· · · · · · · · · · · · · · · · · · ·	1.5/1.00	1 0		 / -		
Time	Volume	Hq	Specific	C Temperature	Mg/L	∧V ORP	ルケル Turbidity	
11110	Removed		Conductivity	Tomporataro		014	1 diblidity	
1025	1.06	7.44	901.5	14.89	5.56	-164	114.2	
1030	2.256	7.41	906.7	15.10	6.25	-185	K9.1	
1035	3,256	7.48	907.8	15.25	5.67	-194	90.1	
1040	3.75	7.50	906.1	15.04	537	-147	44.1	
1045	4.0	7.50	906.6	15.27	4.84	~197	37.7	
1050	5,00	7.50	908.5	15.30	4.44	-198	26.6	
1055	6.0L	750	9080	15.75	3.90	-196	17.9	
1160	7.06	7.50	905.8	15-64	3.38	- 206	13.3	
1105	8.0 C	7.51	906.6	/s/80	2.94	- 513	13.5	
					牧			
Purae Finish T	ime: _///5	•						
Total Volume F	4594							
Final Depth to								
, man = apan as					•			
			Sampling In	formation				
Wellhead Gas	Measurements:	NM						
Sample Collec		1110		<u></u>				
Analytical Suite			LEAD					
QAQC Sample		None	 					
-								
Notes:	CLEAR,	NO OPAL	, NO SHEEN					



Groundwater Sampling Form Well No. *Mω- &is*

Project No. 2	Client:	CHEVRON	<u>،</u>		Well Condition:				
Project No. STO-CIT-010 Date:	Project:	Zwn 200) <i>(</i> (^		Geologist:	Dunc co	h~		
Casing Callons per Foot 1.5 0.09 2 0.16 4 0.05 6 1.5 8 2.6 10 4.1	Project No.				Date:				
Diameter Foot 1.5 0.09 Depth to Water: 43,64				Well Info	rmation				
1.5	_				Total Depth:	49.90			
2	1.5	 							
Sample Collected: Sam									
Sample Collected: Sam		 			-	2"			
Removed PH Conductivity Temperature DO ORP Turbidity						4.76	·		
10 4.1 Purge Volume (3 x Casing Volume):		 	Casing Volu	me (Water Column			(2.656)		
Purge Start Time: Purge Method: Flow Rate: 1/35		4.1	Ů			2.1 9.11	(8 ، د)		
Purge Start Time: 1135									
Purge Method:				Purge Info	rmation				
Time	_								
Time Removed pH Specific Temperature DO ORP Turbidity	_								
1116	Flow Rate:	0	.27 Lpn						
1116		rt		us/on	00	Ma/I	T mV	176	
1140	Time	1	pН			1.30			
1145 3,5	1140		6.70		1671	4.94	-129	1465	
1150									
1155 5.5		4.51					1		
1205					1				
Purge Finish Time: 1215 Total Volume Purged: 9,0 Final Depth to Water: 45.64 Sampling Information Wellhead Gas Measurements: Sample Collection Time: 1210 Analytical Suite Collected: Vocs Nis UEMO AND SAMPLE COLLECTED NO NIS UEMO			711.111			***			
Purge Finish Time: 1215 Total Volume Purged: 9.0c Final Depth to Water: 45.64' Sampling Information Wellhead Gas Measurements: NM Sample Collection Time: 1210 Analytical Suite Collected: Vocs. DIS UENO QAQC Samples Collected: Nove			ľ	· · ·			 		
Total Volume Purged: 9.0c Final Depth to Water: 45.64 Sampling Information Wellhead Gas Measurements: NM Sample Collection Time: 1210 Analytical Suite Collected: Vocs DIS CENO QAQC Samples Collected: 400 E	, , , ,		(0). (1) [070.7		/ C	 		
Total Volume Purged: 9.0c Final Depth to Water: 45.64 Sampling Information Wellhead Gas Measurements: NM Sample Collection Time: 1210 Analytical Suite Collected: Vocs DIS CENO QAQC Samples Collected: 400 E									
Total Volume Purged: 9.0c Final Depth to Water: 45.64 Sampling Information Wellhead Gas Measurements: NM Sample Collection Time: 1210 Analytical Suite Collected: Vocs DIS CENO QAQC Samples Collected: 400 E									
Total Volume Purged: 9.0c Final Depth to Water: 45.64 Sampling Information Wellhead Gas Measurements: NM Sample Collection Time: 1210 Analytical Suite Collected: Vocs DIS CENO QAQC Samples Collected: 400 E									
Sampling Information Wellhead Gas Measurements: Sample Collection Time: Analytical Suite Collected: QAQC Samples Collected: Wore Move	Purge Finish T	ime: <u> 1215</u>							
Sampling Information Wellhead Gas Measurements: Sample Collection Time: Analytical Suite Collected: QAQC Samples Collected: Will E	Total Volume I	Purged: \underline{q} , 0	٠						
Wellhead Gas Measurements: Sample Collection Time: Analytical Suite Collected: QAQC Samples Collected: Will E	Final Depth to	Water: <u>45.</u>	69'						
Sample Collection Time: Analytical Suite Collected: QAQC Samples Collected: MINE				Sampling Inf	formation				
Sample Collection Time: Analytical Suite Collected: QAQC Samples Collected: MINE	Wellhead Gas	Measurements:	NM		•				
Analytical Suite Collected: VOCs DIS LEMO QAQC Samples Collected: MUVE									
QAQC Samples Collected: ผ่น ง ฮั	•			(#FM)		g - 1			
***************************************				3 333112					
	_		11.12.1	ODUN					



Groundwater Sampling Form Well No.<u>Mいつ</u>()

Client:	CHEVRON			Well Condition:	<u> </u>					
Project:	2nd 2007 1M			Geologist:	Dence	Ann				
Project No.	500-017-0	516	· · ·	Date:	11/30/0	7	-			
			Well Info	rmation	·					
Casing	Gallons per		rich milo	·						
Diameter	Foot			Total Depth:	72.70	•				
1.5	0.09		Depth to Water: 65-94							
2	0.16			Depth to Product:						
4	0.65			Casing Diameter:	24					
6	1.5			Water Column:	6.26		-			
8	2.6	Casing Volu	ıme (Water Column	x Gallons per foot):		(3.84)				
10	4.1		Purge Volume (3	x Casing Volume):						
					•					
	: ~	l di	Purge Info	rmation						
Purge Start Tir		140								
Purge Method:	· La	J FLOW								
Flow Rate:		Ó.45 <u> </u>								
Time	Volume Removed	pН	Specific Conductivity	حے Temperature	Mg/C DO	ORP	NTU Turbidity			
1350	6.66	693	1591	16.47	059	-138	0,88			
1355	7.756	6.92	1594	16.89	0.13	-148	53.9			
i401	10.00	6.89	1596	17.4.1	*_	-156	90.4			
1406	12.0L	6.89	1584	17.43	esta esta esta esta esta esta esta esta	-/14	59.1			
1410	13.54	6.89	1577	17.21		-/93	81.78			
1415	15.75	હ.8ઇ	/587	17.17		-203	64.4			
Purge Finish T	ime: <u>142</u> 5	-					·····			
Total Volume F	11.7	. 1								
Final Depth to	.		•							
Tillal Bopili to		<u> </u>								
			Sampling Inf	formation						
Wellhead Gas	Measurements:	***								
Sample Collec	tion Time:	1420								
Analytical Suite	e Collected:	VOC'S DIS	LEAD							
QAQC Sample	s Collected:	NONE		· · · · · · · · · · · · · · · · · · ·						
Notes:	NO SHEEL		, open , HE	AUY IRON	FOULME-	FLOW THRU	nott			
	CELL	. & METER (DATED - WOLL	in Not Funch	on proper	<u>, </u>				



Groundwater Sampling Form Well No. <u>Mいつ</u>

Client:	CHEVRON			Well Condition:	GOOD			
Project:	ZM 200)	IM	DOUG-LA	~	-			
Project No.	500-017-6	16		Date:	11/30/20	בשל		
			Well Info	mation	/ /			
Casing	College per		vveii inioi	mation				
Diameter	Gallons per Foot			Total Depth:	25.30			
1.5	0.09			Depth to Water:	22.03	· · · · · · · · · · · · · · · · · · ·		
2	0.16			Depth to Product:	Mr			
4	0.65			Casing Diameter:	۳5	۳۶		
6	1.5			Water Column:	3.27			
8	2.6	Casing Volu	me (Water Column	x Gallons per foot):	0.5921	0.5gel (1.9L)		
10	4.1		Purge Volume (3	x Casing Volume):	1.5 921	(5.76)		
			Purge Info	rmation				
Purge Start Ti	me: 144	[7						
Purge Method	: <u>Lu</u>	Fu						
Flow Rate:		0.34 Lpm						
	 		115/0-	00	. //	I mV	NTh	
Time	Volume Removed	pН	Specific Conductivity	Temperature	Mayo	ORP	Turbidity	
150Z	6.06	6.72	846.8	20.62	0.11	852-	1335	
1507	8.00	6.84	855.0	20.50	0.03	- 257	47.5	
1512	9.5	7.05	839.8	19.62	0.04	-269	28.1	
1517	10:75	6.94	856.9	20.71	0.03	-265	23,5	
1522	12.00	6.98	850.8	2042	0.07	-515	22-1	
					•••			
					- 			
							<u> </u>	
Purge Finish T	ime: 1 <i>5</i> 3							
Total Volume	Purged: 13°	4						
Final Depth to		·03′						
			Sampling In	formation				
			Oumpang an	iomation				
	Measurements:	·—		- ,-				
Sample Collec		1525	11 / 2015					
Analytical Suit			us ceab					
QAQC Sample	es Collected:	BD3, 1130	007					
Notes:	STRONG	- GOOR !	NO SHEED, 7	TURBID WITH	SRGANIC"F	LAKES"		



Groundwater Sampling Form

Well No. Mu-853

Client:	CHEMON			Well Condition:	(1000)				
Project:	2NO 2007	IM		Geologist:	Dence 4	<u>^</u>			
Project No.	500-017-	- 670 Date:			12/4/0	>			
•									
			Well Infor	mation					
Casing	Gallons per			Total Depth:	2535	/			
Diameter 1.5	Foot 0.09			Depth to Water:	18.50				
2	0.05			Depth to Product:	~/\text{\(\rho\)}				
4	0.65			Casing Diameter:	711	2"			
6	1.5			Water Column:	6.851	679'			
8	2.6	Casing Volu	me (Water Column :		1.1921	<u> </u>			
10	4.1	Odding void	=	x Casing Volume):	3.3 321	(12.2)			
10	4.1		r arge volume (o	k Odoling Volumo).	<u>3.092.</u>				
		į,							
	ia ~		Purge Info	rmation					
Purge Start Ti									
Purge Method		FUN	<u></u>						
Flow Rate:	<u>ර</u> ු	37 Lpn							
		1	AS/cm Specific	- °C	Male	mV	Mu		
Time	Volume Removed	pН	Specific Conductivity	Temperature	Mg/C BO	ORP	Turbidity		
						<u> </u>	200		
1455	2.75	6.95	877.4	20.44	0.14	-311	88x.6		
1500	5,00	6.86	906.6	21.12	0.12	- 298	3495		
1505	6.756	6.80	911.5	20.66	0.14	-215	107.2		
1510	800	6.88	909.5	20.58	0.15	- 291	75.6		
1515	9. 50	6.89	912.6	21.24	0.15	-289	48.7		
1520	10.5 L	6.89	912.9	20.78	0.16	- Z90	24.7		
1525	12.56	<u>త-క్రై</u>	920.3	21.99	0.15	-293	8.9		
1530	14.75	6.88	934.4	20.98	0.15	- 28°	5.1		
							-		
				<u> </u>		<u> </u>	.]		
Purge Finish 1	ime: /.5%	ło							
Total Volume									
Final Depth to									
·									
			Sampling In	formation					
Wellhead Gas	Measurements:	Nm							
Sample Collec	ction Time:	1535							
Analytical Sui	te Collected:		015 Lemo						
QAQC Sampl		HONE							
					.1 1				
Notes:	Very	turbed e fr	rst going	des string	eder st	ight sheen			



Groundwater Sampling Form Well No. <u>Mพ -85 I</u>

Client:	CHEVRON Well Condition:				Good		
Project:	ZNO ZOO	7 1~	DUNG LA	-			
Project No.	500-017-0	516		Date:	12/04/0	7	-
			Well Info	rmation			
Casing	Gallons per		Well lillo	mation			
Diameter	Foot			Total Depth:	45.40'		
1.5	0.09			Depth to Water:	19,351		
2	0.16			Depth to Product:	NP		
4	0.65			Casing Diameter:	2"		
6	1.5			Water Column:	26.05		
8	2.6	Casing Volu	me (Water Column	x Gallons per foot):	4.2921		
10	4.1		Purge Volume (3	x Casing Volume):	12.693	1 (472)	
					,		
			Purge Info	rmation			
Purge Start Ti	me: <u>12</u> 0) >					
Purge Method	•	FRU					
Flow Rate:		1.29 cpm					
r			1.4.6.100	1 _ Y			
Time	Volume Removed	pН	Specific Conductivity	Temperature	mg L	ρ√ ORP	んか Turbidity
1210	2.52	7.45	786.8	17.32	4.48	47	132.4
1215	3.5L	7.47	728.6	17-65	5.83	29	63.7
1220	4.25	7.46	782.1	17.10	5.65	19	30.6
1225	5500	7.48	774.6	18.61	4.80	i3	14.8
1230	8.75	7.46	778.6	1789	4.00	10	8.0
1235	805	7.47	778.4	17,8)	3.41		6.5
1240	9.75L	747	7783	17-95	2.76	1	4.7
1250	13 L	7.46	7725	1827	1.96	-ల	3,9
1255	14.52	7,47	77613	18.34	1.76	-11	4.2
Purge Finish T	ime: 130	s.5	•				
Total Volume							
Final Depth to							
•	<u> </u>						
•			Sampling In	formation			
Wellhead Gas	Measurements:						
Sample Collec	tion Time:	/300		. 			
Analytical Suit	e Collected:	Voc's Di	S LEAD				
QAQC Sample	es Collected:	MW-85I MS	/MSD, 120407	<u> </u>			
Notes:	Con	y clez, 1	o oder, No	sheen			
· .							





Groundwater Sampling Form Well No. אוט-פאלים

Client:	CHEVEON	1		Well Condition:	<u> </u>			
Project:		Jo てのり IM Geologist:			Donc- 2	9~		
Project No.	Spc 500-	017-616		Date:	12/4/07			
Well Information								
Casing	Collons nor		well infon	mation				
Diameter	Gallons per Foot			Total Depth:	68,35			
1.5	0.09			Depth to Water:	/8 89			
2	0.16			Depth to Product:	MA		<u> </u>	
4	0.65			Casing Diameter:	2"			
6	1.5			Water Column:	49.461			
8	2.6	Casing Volu	me (Water Column >	Gallons per foot):	7.9 gal	(304)		
10	4.1		Purge Volume (3 x	Casing Volume):	23.741	(90 L)		
						,		
			Purge Infor	mation				
Purge Start Tir	me: <u>/CS</u> 0	,						
Purge Method	: <u>L</u> ow	Febru	······					
Flow Rate:		FLOW						
Time	V ol ume		Specific	oc To	mg/L DO	mV	NTI	
Time	Removed	рН	Conductivity	Temperature	บับ	ORP	Turbidity	
1055	2.252	7.36	631.4 7770.	15.10	9.19	123	29.1	
1150	3.836	7.40	736.8	15.93	830	95	23.5	
1105	3.75€	7.42	760.4	17.22	7.2)	ንሬ	.55 0	
1110	4.75	7.38	766.5	17.21	6.96	72	20.3	
1115	6.0 (7.41	757.2	16.30	6.41	59	13.3	
1120	7.06	7.41	743.0	16.61	5-83	49	9.7	
1125	7.256	7.42	747.8	16.00	5-61	<u>40</u>	િ	
1130	B.25L	7.41	753.7	16.96	5.05	34	6.9	
1135	9.0L	7.42	757.0	16.61	4.74	27	5.0	
Purge Finish T	ime:/14 <i>\(</i>							
Total Volume F								
Final Depth to	-	89 ´						
•								
			Sampling Info	ormation				
Wellhead Gas	Measurements:							
Sample Collec	tion Time:	1140						
Analytical Suite	Collected:	Voc's Dis	COAD					
QAQC Sample	s Collected:	MONE						
Notes:	moco oh	NO SHEE	CLEM					
•		•						

APPENDIX B

LABORATORY ANALYTICAL REPORTS

NOVEMBER TO DECEMBER 2007 (SECOND SEMIANNUAL) MONITORING EVENT





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

ANALYTICAL RESULTS

Prepared for:

Chevron PO Box 96 North Bend OH 42052

Prepared by:

Lancaster Laboratories 2425 New Holland Pike Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 1066181. Samples arrived at the laboratory on Saturday, November 17, 2007. The PO# for this group is 0015007286 and the release number is 50008931.

Client Description	Lancaster Labs Number
L-4R,111007 Grab Water Sample	5216314
MW-33,110907 Grab Water Sample	5216315
MW-23,110907 Grab Water Sample	5216316
MW-104,111007 Grab Water Sample	5216317
MW-95D,111407 Grab Water Sample	5216318
MW-65D,111207 Grab Water Sample	5216319
BD1,111407 Grab Water Sample	5216320
MW-65S,111207 Grab Water Sample	5216321
MW-65I,111207 Grab Water Sample	5216322
MW-95S,111407 Grab Water Sample	5216323
MW-120,111507 Grab Water Sample	5216324
MW-26R,111407 Grab Water Sample	5216325
MW-100S,111607 Grab Water Sample	5216326
TB,111607 Water Sample	5216327

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

1 COPY TO	Trihydro Corporation	Attn: Chris Aneiros
ELECTRONIC	Trihydro Corporation	Attn: Trihydro Database





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

COPY TO 1 COPY TO

Data Package Group

Questions? Contact your Client Services Representative Gwen A Birchall at (717) 656-2300

Respectfully Submitted,

Marla S. Lord Senior Specialist





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5216314

L-4R,111007 Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:11/10/2007 13:40 by DL Account Number: 11494

Submitted: 11/17/2007 10:30 Chevron Reported: 12/04/2007 at 11:26 PO Box 96

Discard: 02/03/2008 North Bend OH 42052

IML4R SDG#: HVO63-01

I 5E w

T 2E /	N			As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
0705	5 Lead	7439-92-1	N.D.	0.0069	mg/l	1
0637	1 8260 Special Cmpds for Waters					
0541	6 m+p-Xylene	n.a.	N.D.	0.8	ug/l	1
0541	7 o-Xylene	95-47-6	N.D.	0.8	ug/l	1
0817	1 1,3-Dichlorobenzene	541-73-1	N.D.	1.	ug/l	1
0817	2 1,4-Dichlorobenzene	106-46-7	N.D.	1.	ug/l	1
0817	3 1,2-Dichlorobenzene	95-50-1	N.D.	1.	ug/l	1
0758	2 PPL + Xylene (total) by 8260					
0540	1 Benzene	71-43-2	N.D.	0.5	ug/l	1
0540	7 Toluene	108-88-3	N.D.	0.7	ug/l	1
0541	3 Chlorobenzene	108-90-7	N.D.	0.8	ug/l	1
0541	5 Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
0631	0 Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			2	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/04/2007 01:11	Tara L Snyder	1
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	11/20/2007 23:02	Kelly E Brickley	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	11/20/2007 23:02	Kelly E Brickley	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	11/20/2007 23:02	Kelly E Brickley	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	11/27/2007 00:10	Helen L Schaeffer	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5216315

MW-33,110907 Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:11/09/2007 16:15 by DL Account Number: 11494

Submitted: 11/17/2007 10:30 Chevron Reported: 12/04/2007 at 11:26 PO Box 96

Discard: 02/03/2008 North Bend OH 42052

IMM33 SDG#: HVO63-02

I 5E w

1	5E W				As Received		
	CAT			As Received	Method		Dilution
	No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
	07055	Lead	7439-92-1	N.D.	0.0069	mg/l	1
	06371	8260 Special Cmpds for Waters					
	05416	m+p-Xylene	n.a.	N.D.	0.8	ug/l	1
	05417	o-Xylene	95-47-6	N.D.	0.8	ug/l	1
	08171	1,3-Dichlorobenzene	541-73-1	N.D.	1.	ug/l	1
	08172	1,4-Dichlorobenzene	106-46-7	N.D.	1.	ug/l	1
	08173	1,2-Dichlorobenzene	95-50-1	N.D.	1.	ug/l	1
	07582	PPL + Xylene (total) by 8260					
	05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
	05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
	05413	Chlorobenzene	108-90-7	N.D.	0.8	ug/l	1
	05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
	06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			4	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/04/2007 01:14	Tara L Snyder	1
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	11/20/2007 23:25	Kelly E Brickley	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	11/20/2007 23:25	Kelly E Brickley	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	11/20/2007 23:25	Kelly E Brickley	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	11/27/2007 00:10	Helen L Schaeffer	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5216316

MW-23,110907 Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:11/09/2007 14:57 by DL Account Number: 11494

Submitted: 11/17/2007 10:30 Chevron Reported: 12/04/2007 at 11:26 PO Box 96

Discard: 02/03/2008 North Bend OH 42052

IMM23 SDG#: HVO63-03

I 5E w

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
07055	Lead	7439-92-1	N.D.	0.0069	mg/l	1
06371	8260 Special Cmpds for Waters					
05416	m+p-Xylene	n.a.	N.D.	0.8	ug/l	1
05417	o-Xylene	95-47-6	N.D.	0.8	ug/l	1
08171	1,3-Dichlorobenzene	541-73-1	N.D.	1.	ug/l	1
08172	1,4-Dichlorobenzene	106-46-7	N.D.	1.	ug/l	1
08173	1,2-Dichlorobenzene	95-50-1	N.D.	1.	ug/l	1
07582	PPL + Xylene (total) by 8260					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05413	Chlorobenzene	108-90-7	N.D.	0.8	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			-	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/04/2007 01:18	Tara L Snyder	1
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	11/21/2007 00:09	Kelly E Brickley	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	11/21/2007 00:09	Kelly E Brickley	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	11/21/2007 00:09	Kelly E Brickley	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	11/27/2007 00:10	Helen L Schaeffer	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5216317

MW-104,111007 Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:11/10/2007 14:50 by DL Account Number: 11494

Submitted: 11/17/2007 10:30 Chevron Reported: 12/04/2007 at 11:26 PO Box 96

Discard: 02/03/2008 North Bend OH 42052

IM104 SDG#: HVO63-04

I 5E w

1 JE W				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
07055	Lead	7439-92-1	N.D.	0.0069	mg/l	1
06371	8260 Special Cmpds for Waters					
05416	m+p-Xylene	n.a.	N.D.	0.8	ug/l	1
05417	o-Xylene	95-47-6	N.D.	0.8	ug/l	1
08171	1,3-Dichlorobenzene	541-73-1	N.D.	1.	ug/l	1
08172	1,4-Dichlorobenzene	106-46-7	N.D.	1.	ug/l	1
08173	1,2-Dichlorobenzene	95-50-1	N.D.	1.	ug/l	1
07582	PPL + Xylene (total) by 8260					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05413	Chlorobenzene	108-90-7	N.D.	0.8	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT		-		Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/04/2007 01:21	Tara L Snyder	1
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	11/21/2007 00:32	Kelly E Brickley	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	11/21/2007 00:32	Kelly E Brickley	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	11/21/2007 00:32	Kelly E Brickley	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	11/27/2007 00:10	Helen L Schaeffer	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5216318

MW-95D,111407 Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:11/14/2007 10:35 by DL Account Number: 11494

Submitted: 11/17/2007 10:30 Chevron Reported: 12/04/2007 at 11:26 PO Box 96

Discard: 02/03/2008 North Bend OH 42052

IM95D SDG#: HVO63-05

I 5E w

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
07055	Lead	7439-92-1	N.D.	0.0069	mg/l	1
06371	8260 Special Cmpds for Waters					
05416	m+p-Xylene	n.a.	N.D.	0.8	ug/l	1
05417	o-Xylene	95-47-6	N.D.	0.8	ug/l	1
08171	1,3-Dichlorobenzene	541-73-1	N.D.	1.	ug/l	1
08172	1,4-Dichlorobenzene	106-46-7	N.D.	1.	ug/l	1
08173	1,2-Dichlorobenzene	95-50-1	N.D.	1.	ug/l	1
07582	PPL + Xylene (total) by 8260					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05413	Chlorobenzene	108-90-7	N.D.	0.8	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			-	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/04/2007 01:24	Tara L Snyder	1
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	11/21/2007 00:54	Kelly E Brickley	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	11/21/2007 00:54	Kelly E Brickley	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	11/21/2007 00:54	Kelly E Brickley	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	11/27/2007 00:10	Helen L Schaeffer	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5216319

MW-65D,111207 Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:11/12/2007 11:59 by DL Account Number: 11494

Submitted: 11/17/2007 10:30 Chevron Reported: 12/04/2007 at 11:26 PO Box 96

Discard: 02/03/2008 North Bend OH 42052

IM65D SDG#: HV063-06

I 5E w

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
07055	Lead	7439-92-1	N.D.	0.0069	mg/l	1
06371	8260 Special Cmpds for Waters					
05416	m+p-Xylene	n.a.	N.D.	0.8	ug/l	1
05417	o-Xylene	95-47-6	N.D.	0.8	ug/l	1
08171	1,3-Dichlorobenzene	541-73-1	N.D.	1.	ug/l	1
08172	1,4-Dichlorobenzene	106-46-7	N.D.	1.	ug/l	1
08173	1,2-Dichlorobenzene	95-50-1	N.D.	1.	ug/l	1
07582	PPL + Xylene (total) by 8260					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05413	Chlorobenzene	108-90-7	N.D.	0.8	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			1	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/04/2007 01:28	Tara L Snyder	1
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	11/21/2007 01:17	Kelly E Brickley	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	11/21/2007 01:17	Kelly E Brickley	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	11/21/2007 01:17	Kelly E Brickley	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	11/27/2007 00:10	Helen L Schaeffer	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5216320

BD1,111407 Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:11/14/2007 by DL Account Number: 11494

Submitted: 11/17/2007 10:30 Chevron Reported: 12/04/2007 at 11:26 PO Box 96

Discard: 02/03/2008 North Bend OH 42052

IMBD1 SDG#: HVO63-07FD

I 5E w

I DE W				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
07055	Lead	7439-92-1	N.D.	0.0069	mg/l	1
06371	8260 Special Cmpds for Waters					
05416	m+p-Xylene	n.a.	N.D.	0.8	ug/l	1
05417	o-Xylene	95-47-6	N.D.	0.8	ug/l	1
08171	1,3-Dichlorobenzene	541-73-1	N.D.	1.	ug/l	1
08172	1,4-Dichlorobenzene	106-46-7	N.D.	1.	ug/l	1
08173	1,2-Dichlorobenzene	95-50-1	N.D.	1.	ug/l	1
07582	PPL + Xylene (total) by 8260					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05413	Chlorobenzene	108-90-7	N.D.	0.8	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/04/2007 01:38	Tara L Snyder	1
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	11/21/2007 01:39	Kelly E Brickley	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	11/21/2007 01:39	Kelly E Brickley	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	11/21/2007 01:39	Kelly E Brickley	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	11/27/2007 00:10	Helen L Schaeffer	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5216321

MW-65S,111207 Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:11/12/2007 13:07 by DL Account Number: 11494

Submitted: 11/17/2007 10:30 Chevron Reported: 12/04/2007 at 11:26 PO Box 96

Discard: 02/03/2008 North Bend OH 42052

IM65S SDG#: HV063-08

I 5E w

1	5E W				As Received		
	CAT			As Received	Method		Dilution
	No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
	07055	Lead	7439-92-1	N.D.	0.0069	mg/l	1
	06371	8260 Special Cmpds for Waters					
	05416	m+p-Xylene	n.a.	N.D.	0.8	ug/l	1
	05417	o-Xylene	95-47-6	N.D.	0.8	ug/l	1
	08171	1,3-Dichlorobenzene	541-73-1	N.D.	1.	ug/l	1
	08172	1,4-Dichlorobenzene	106-46-7	N.D.	1.	ug/l	1
	08173	1,2-Dichlorobenzene	95-50-1	N.D.	1.	ug/l	1
	07582	PPL + Xylene (total) by 8260					
	05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
	05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
	05413	Chlorobenzene	108-90-7	N.D.	0.8	ug/l	1
	05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
	06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			1	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/04/2007 01:41	Tara L Snyder	1
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	11/21/2007 02:02	Kelly E Brickley	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	11/21/2007 02:02	Kelly E Brickley	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	11/21/2007 02:02	Kelly E Brickley	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	11/27/2007 00:10	Helen L Schaeffer	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5216322

MW-65I,111207 Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:11/12/2007 12:37 by DL Account Number: 11494

Submitted: 11/17/2007 10:30 Chevron Reported: 12/04/2007 at 11:26 PO Box 96

Discard: 02/03/2008 North Bend OH 42052

IM65I SDG#: HVO63-09

I 5E w

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
07055	Lead	7439-92-1	N.D.	0.0069	mg/l	1
06371	8260 Special Cmpds for Waters					
05416	m+p-Xylene	n.a.	N.D.	0.8	ug/l	1
05417	o-Xylene	95-47-6	N.D.	0.8	ug/l	1
08171	1,3-Dichlorobenzene	541-73-1	N.D.	1.	ug/l	1
08172	1,4-Dichlorobenzene	106-46-7	N.D.	1.	ug/l	1
08173	1,2-Dichlorobenzene	95-50-1	N.D.	1.	ug/l	1
07582	PPL + Xylene (total) by 8260					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05413	Chlorobenzene	108-90-7	N.D.	0.8	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			2	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/04/2007 01:45	Tara L Snyder	1
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	11/21/2007 02:24	Kelly E Brickley	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	11/21/2007 02:24	Kelly E Brickley	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	11/21/2007 02:24	Kelly E Brickley	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	11/27/2007 00:10	Helen L Schaeffer	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 2

Lancaster Laboratories Sample No. WW 5216323

MW-95S,111407 Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:11/14/2007 14:30 by DL Account Number: 11494

Submitted: 11/17/2007 10:30 Chevron Reported: 12/04/2007 at 11:26 PO Box 96

Discard: 02/03/2008 North Bend OH 42052

IM95S SDG#: HVO63-10

I 5E w

1 3E W				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
07055	Lead	7439-92-1	N.D.	0.0069	mg/l	1
06371	8260 Special Cmpds for Waters					
05416	m+p-Xylene	n.a.	N.D.	0.8	ug/l	1
05417	o-Xylene	95-47-6	N.D.	0.8	ug/l	1
08171	1,3-Dichlorobenzene	541-73-1	N.D.	1.	ug/l	1
08172	1,4-Dichlorobenzene	106-46-7	N.D.	1.	ug/l	1
08173	1,2-Dichlorobenzene	95-50-1	N.D.	1.	ug/l	1
07582	PPL + Xylene (total) by 8260					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05413	Chlorobenzene	108-90-7	N.D.	0.8	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1
	Dragaristian remiirements were	not mot The	rrial aubmitted f	om molatila		

Preservation requirements were not met. The vial submitted for volatile analysis did not have a pH < 2 at the time of analysis. Due to the volatile nature of the analytes, it is not appropriate for the laboratory to adjust the pH at the time of sample receipt. The pH of this sample was pH = 4.

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

(CAT				Analysis		Dilution
1	No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
(07055	Lead	SW-846 6010B	1	12/04/2007 01:48	Tara L Snyder	1
(06371	8260 Special Cmpds for Waters	SW-846 8260B	1	11/21/2007 02:46	Kelly E Brickley	1
(07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	11/21/2007 02:46	Kelly E Brickley	1
(01163	GC/MS VOA Water Prep	SW-846 5030B	1	11/21/2007 02:46	Kelly E Brickley	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 2 of 2

Lancaster Laboratories Sample No. WW 5216323

MW-95S,111407 Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:11/14/2007 14:30 by DL Account Number: 11494

Submitted: 11/17/2007 10:30 Chevron Reported: 12/04/2007 at 11:26 PO Box 96

Discard: 02/03/2008 North Bend OH 42052

IM95S SDG#: HVO63-10

01848 WW SW846 ICP Digest (tot SW-846 3005A 1 11/27/2007 00:10 Helen L Schaeffer 1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5216324

MW-120,111507 Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:11/15/2007 16:30 by DL Account Number: 11494

Submitted: 11/17/2007 10:30 Chevron Reported: 12/04/2007 at 11:26 PO Box 96

Discard: 02/03/2008 North Bend OH 42052

IM120 SDG#: HVO63-11

I 5E w

1	5E W				As Received		
	CAT			As Received	Method		Dilution
	No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
	07055	Lead	7439-92-1	N.D.	0.0069	mg/l	1
	06371	8260 Special Cmpds for Waters					
	05416	m+p-Xylene	n.a.	N.D.	0.8	ug/l	1
	05417	o-Xylene	95-47-6	N.D.	0.8	ug/l	1
	08171	1,3-Dichlorobenzene	541-73-1	N.D.	1.	ug/l	1
	08172	1,4-Dichlorobenzene	106-46-7	N.D.	1.	ug/l	1
	08173	1,2-Dichlorobenzene	95-50-1	N.D.	1.	ug/l	1
	07582	PPL + Xylene (total) by 8260					
	05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
	05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
	05413	Chlorobenzene	108-90-7	N.D.	0.8	ug/l	1
	05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
	06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			4	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/04/2007 01:51	Tara L Snyder	1
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	11/21/2007 03:09	Kelly E Brickley	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	11/21/2007 03:09	Kelly E Brickley	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	11/21/2007 03:09	Kelly E Brickley	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	11/27/2007 00:10	Helen L Schaeffer	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5216325

MW-26R,111407 Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:11/14/2007 16:00 by DL Account Number: 11494

Submitted: 11/17/2007 10:30 Chevron Reported: 12/04/2007 at 11:26 PO Box 96

Discard: 02/03/2008 North Bend OH 42052

IM26R SDG#: HVO63-12

I 5E w

I DE W				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
07055	Lead	7439-92-1	N.D.	0.0069	mg/l	1
06371	8260 Special Cmpds for Waters					
05416	m+p-Xylene	n.a.	N.D.	0.8	ug/l	1
05417	o-Xylene	95-47-6	N.D.	0.8	ug/l	1
08171	1,3-Dichlorobenzene	541-73-1	N.D.	1.	ug/l	1
08172	1,4-Dichlorobenzene	106-46-7	N.D.	1.	ug/l	1
08173	1,2-Dichlorobenzene	95-50-1	N.D.	1.	ug/l	1
07582	PPL + Xylene (total) by 8260					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05413	Chlorobenzene	108-90-7	N.D.	0.8	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			-	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/04/2007 01:55	Tara L Snyder	1
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	11/21/2007 07:16	Kelly E Brickley	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	11/21/2007 07:16	Kelly E Brickley	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	11/21/2007 07:16	Kelly E Brickley	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	11/27/2007 00:10	Helen L Schaeffer	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5216326

MW-100S,111607 Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:11/16/2007 13:10 by DL Account Number: 11494

Submitted: 11/17/2007 10:30 Chevron Reported: 12/04/2007 at 11:26 PO Box 96

Discard: 02/03/2008 North Bend OH 42052

IM100 SDG#: HVO63-13

I 5E w

I DE W				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
07055	Lead	7439-92-1	N.D.	0.0069	mg/l	1
06371	8260 Special Cmpds for Waters					
05416	m+p-Xylene	n.a.	N.D.	0.8	ug/l	1
05417	o-Xylene	95-47-6	N.D.	0.8	ug/l	1
08171	1,3-Dichlorobenzene	541-73-1	N.D.	1.	ug/l	1
08172	1,4-Dichlorobenzene	106-46-7	N.D.	1.	ug/l	1
08173	1,2-Dichlorobenzene	95-50-1	N.D.	1.	ug/l	1
07582	PPL + Xylene (total) by 8260					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05413	Chlorobenzene	108-90-7	N.D.	0.8	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			1	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/04/2007 01:58	Tara L Snyder	1
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	11/21/2007 03:54	Kelly E Brickley	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	11/21/2007 03:54	Kelly E Brickley	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	11/21/2007 03:54	Kelly E Brickley	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	11/27/2007 00:10	Helen L Schaeffer	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5216327

TB,111607 Water Sample
Interim Measures (IM) Groundwater Monitoring

Collected:11/16/2007 15:00 by DL Account Number: 11494

Submitted: 11/17/2007 10:30 Chevron Reported: 12/04/2007 at 11:26 PO Box 96

Discard: 02/03/2008 North Bend OH 42052

IMTB- SDG#: HVO63-14TB

I 5E w

				As Received		
CAT No.	Analysis Name	CAS Number	As Received Result	Method Detection	Units	Dilution Factor
				Limit		
06371	8260 Special Cmpds for Waters					
05416	m+p-Xylene	n.a.	N.D.	0.8	ug/l	1
05417	o-Xylene	95-47-6	N.D.	0.8	ug/l	1
08171	1,3-Dichlorobenzene	541-73-1	N.D.	1.	ug/l	1
08172	1,4-Dichlorobenzene	106-46-7	N.D.	1.	ug/l	1
08173	1,2-Dichlorobenzene	95-50-1	N.D.	1.	ug/l	1
07582	PPL + Xylene (total) by 8260					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05413	Chlorobenzene	108-90-7	N.D.	0.8	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	11/21/2007 04:16	Kelly E Brickley	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	11/21/2007 04:16	Kelly E Brickley	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	11/21/2007 04:16	Kelly E Brickley	1



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 2

Quality Control Summary

Client Name: Chevron Group Number: 1066181

Reported: 12/04/07 at 11:26 AM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Blank <u>Result</u>	Blank <u>MDL</u>	Report <u>Units</u>	LCS <u>%REC</u>	LCSD <u>%REC</u>	LCS/LCSD <u>Limits</u>	RPD	RPD Max
Sample n	umber(s):	5216314-52	16326				
N.D.	0.0069	mg/l	97		90-113		
Sample n	umber(s):	5216314-52	16327				
N.D.	0.5	ug/l	95	95	78-119	0	30
N.D.	0.7	ug/l	94	95	85-115	1	30
N.D.	0.8	ug/l	96	96	85-115	1	30
N.D.	0.8	ug/l	96	96	82-119	0	30
N.D.	0.8	ug/l	91	93	83-113	1	30
N.D.	0.8	ug/l	90	91	83-113	1	30
N.D.	0.8	ug/l	91	92	83-113	1	30
N.D.	1.	ug/l	96	96	81-114	0	30
N.D.	1.	ug/l	98	96	84-116	2	30
N.D.	1.	ug/l	96	95	81-112	1	30
	Result Sample n N.D. Sample n N.D. N.D. N.D. N.D. N.D. N.D. N.D. N.D	Result MDL Sample number(s): 0.0069 Sample number(s): 0.5 N.D. 0.5 N.D. 0.7 N.D. 0.8 N.D. 0.8 N.D. 0.8 N.D. 0.8 N.D. 0.8 N.D. 1. N.D. 1.	Result MDL Units Sample number(s): 5216314-52 N.D. 0.0069 mg/l Sample number(s): 5216314-52 N.D. 0.5 ug/l N.D. 0.7 ug/l N.D. 0.8 ug/l N.D. 0.8 ug/l N.D. 0.8 ug/l N.D. 0.8 ug/l N.D. 1. ug/l N.D. 1. ug/l N.D. 1. ug/l	Result MDL Units %REC Sample number(s): 5216314-5216326 N.D. 0.0069 mg/l 97 Sample number(s): 5216314-5216327 N.D. 0.5 ug/l 95 N.D. 0.7 ug/l 94 N.D. 0.8 ug/l 96 N.D. 0.8 ug/l 91 N.D. 0.8 ug/l 90 N.D. 0.8 ug/l 91 N.D. 1. ug/l 96 N.D. 1. ug/l 98	Result MDL Units %REC %REC Sample number(s): 5216314-5216326 N.D. 97 Sample number(s): 5216314-5216327 N.D. 0.5 ug/l 95 95 N.D. 0.7 ug/l 94 95 N.D. 0.8 ug/l 96 96 N.D. 0.8 ug/l 96 96 N.D. 0.8 ug/l 91 93 N.D. 0.8 ug/l 90 91 N.D. 0.8 ug/l 91 92 N.D. 1. ug/l 96 96 N.D. 1. ug/l 98 96	Result MDL Units %REC %REC Limits Sample number(s): 5216314-5216326 97 90-113 Sample number(s): 5216314-5216327 95 95 78-119 N.D. 0.5 ug/l 94 95 85-115 N.D. 0.8 ug/l 96 85-115 N.D. 0.8 ug/l 96 82-119 N.D. 0.8 ug/l 91 93 83-113 N.D. 0.8 ug/l 90 91 83-113 N.D. 0.8 ug/l 91 92 83-113 N.D. 1. ug/l 96 81-114 N.D. 1. ug/l 96 81-114 N.D. 1. ug/l 98 96 84-116	Result MDL Units %REC %REC Limits RPD Sample number(s): 5216314-5216326 97 90-113 Sample number(s): 5216314-5216327 90-113 N.D. 0.5 ug/l 95 95 78-119 0 N.D. 0.7 ug/l 94 95 85-115 1 N.D. 0.8 ug/l 96 96 85-115 1 N.D. 0.8 ug/l 96 96 82-119 0 N.D. 0.8 ug/l 91 93 83-113 1 N.D. 0.8 ug/l 90 91 83-113 1 N.D. 0.8 ug/l 91 92 83-113 1 N.D. 1. ug/l 96 96 81-114 0 N.D. 1. ug/l 96 84-116 2

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD <u>MAX</u>	BKG <u>Conc</u>	DUP <u>Conc</u>	DUP <u>RPD</u>	Dup RPD <u>Max</u>
Batch number: 073301848002	Sample	number(s)	: 5216314	-521632	26 UNSI	PK: P216436	BKG: P21643	6	
Lead	103	108	75-125	5	20	N.D.	N.D.	0 (1)	20
Batch number: L073242AA	Sample	number(s)	: 5216314	-521632	27 UNSE	PK: 5216315			
Benzene	103		83-128						
Toluene	100		83-127						
Chlorobenzene	101		83-120						
Ethylbenzene	104		82-129						
m+p-Xylene	98		82-130						
o-Xylene	95		82-130						
Xylene (Total)	97		82-130						
1,3-Dichlorobenzene	101		79-123						
1,4-Dichlorobenzene	101		81-122						
1,2-Dichlorobenzene	99		82-117						

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

PA ARCHIVE DOCUMENT



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 2 of 2

Quality Control Summary

Client Name: Chevron Group Number: 1066181

Reported: 12/04/07 at 11:26 AM

Surrogate Quality Control

Analysis Name: PPL + Xylene (total) by 8260

Allalys	SIS	Name	:	PPL	+	Λy	ΤF
Batch	nur	mber:]	L0732	42	2AA	

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5216314	106	99	105	98
5216315	106	97	101	96
5216316	104	95	106	101
5216317	106	98	105	97
5216318	107	96	104	97
5216319	106	98	104	97
5216320	107	98	104	97
5216321	106	98	102	96
5216322	106	99	104	96
5216323	107	97	104	96
5216324	107	97	105	96
5216325	107	96	105	96
5216326	107	96	105	95
5216327	107	99	105	96
Blank	106	96	105	97
LCS	105	98	107	106
LCSD	106	97	107	105
MS	105	97	107	106
Limits:	80-116	77-113	80-113	78-113

^{*-} Outside of specification

⁽¹⁾ The result for one or both determinations was less than five times the LOQ.

⁽²⁾ The unspiked result was more than four times the spike added.

Analysis Request/ Environmental Services Chain of Custody



For Lancaster Laboratories use only

Acct. # 11494 Group# 1066181 sample # 5216314-27 COC # 0165359

45	Р	lease print. In:	structi	ions or	n revei	se sid	ie cori	respon	0.0000000000000000000000000000000000000	***********		ers. s Req		-4		For Lab Use Only		
1)	8 . 4 <i>1</i> 1	1/1/0/1			Ma	trix .	Ļ.		10	******	******	ion Co	ereceptoren			FSC: SCR#:		_
Project Name/#: <u>SATM Ground Stater</u>	PWSID	#:		_		oolicable	(4) 									Preservation Codes H=HCl T=Thiosul	fate	
Project Manager: <u>Chris Anurus</u>				34	- 12	۲ 0	2						1			N=HNO ₃ B=NaOH S=H ₂ SO ₄ O=Other		. 7
Sampler: Doug land	Quote #	:	_	_	4		nta!		chic)			/7b/				SEE ATTACHED		
Name of state where samples were collected:			(3)	80		á	8	2360	705	,	(X				ANALYTE LIST		
2 Sample identification	Date Collected	Time Collected		Q.	Soll	Water	Total # 0	700				V				Remarks		Particular de la constanta de
L-4R 111067	11/10/07	/340	X			x	4	3	i									
MW-33, 110907	11/09/07	1615	X		1	r	4	3	1		abla T							
MU-23, 110967	11/03/07	I	ير		1	۲	4	2	ì		V							
MU-104, 116007	11/10/07		1			K	4	3	1		4	10	त					
MD-95D, 111467	11/14/07		x			r	4	1	1			72	1					
MU-650, 111207	11/12/07		×		ز		4						abla					
394 801, 111467	11/14/07		X			r	4		1				\top					
MU-655, 111267	11/12/07	/3:07	1		ړ		4		1					I				
MW-651,11207	11/12/57	12:37	x			r	4		1									
MW- 955, 11407	11/14/07	14,30	X			×	4		i							Metale Centiler Pertin	11. Giller	·
Turnaround Time Requested (TAT) (please (Rush TAT is subject to Lancaster Laboratories app	circle): Norma	Rush		Relin	quish	ed by	· (2			Date 11/16/	Tin		Receive	d by:			Time (
Date results are needed: Rush results requested by (please circle): Phone #:Fax #:				Re (n	quish	ed by	r:				Date	Tin	ne F	Receive	ed by:	:	Date	Time
E-mail address:				Relin	deinb	ed by	r:				Date	Tin	ne F	Receive	d by:		Date	Time
	Y RCP	OG Complete	- 1	Relin	quish	ed by	<u>, ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;</u>		_		Date	Tir	ne F	Receive	ed by:	1	Date	Time
Type III (Reduced NJ) Type IV (CLP SOW) Type VI (Raw Data Only) Site-specific QC (If yes, indicate QC sample and s Internal COC Re	submit triplicate volume.)			Relin	quish	ed by	<i>r</i> :				Qate	Tir	ne F	eceive	d/by:	I All /	Date	Time

Analysis Request/Environmental Services Chain of Custody



For Lancaster Laboratories use only

Acct. # 11494 Group# 1066181 Sample # 5316314-27 COC # 0165360

Please print. Instructions on reverse side correspond with circled numbers. For Lab Use Only (5) Analyses Requested FSC: Acct. #: _//494 Client: Cheuron Preservation Codes SCR#: Preservation Codes Project Name/#: SAIM Gronducter PWSID #: _____ H=HCI T=Thiosulfate Project Manager: Chis April 5.00-017-010 N=HNO₃ B=NaOH S=H₂SO₄ O=Other Sampler: Quote #: SEE ATTACHED ANALYTE LIST Time & E Time Sample Identification Collected Remarks MW-120, 111507 MW-26R, 11/407 Metals Contine Potally filled. 11-16-07 MG)-1005, 11/607 13/0 TB, 111607 11-16-67 1500 Turnaround Time Requested (TAT) (please circle): Normal Rush Relinquished by: Time (9 Date Time Received by: Date (Rush TAT is subject to Lancaster Laboratories approval and surcharge.) 1/16/07 2000 Date results are needed: Relinquished by: Time Received by: Date Date Time Rush results requested by (please circle): Phone Fax E-mail Phone #: Fax #: E-mail address: Relinquished by: Time | Received by: Date Date Time Data Package Options (please circle if required) SDG Complete? Type I (validation/NJ Reg) TX TRRP-13 Yes No Relinguished by: Time Received by: Date Date Time Type I (Tier II) MA MCP CT RCP Site-specific QC (MS/MSD/Dup) Yes No Type III (Reduced NJ) Type IV (CLP SOW) Relinguished by: Date Time Received by: (If yes, indicate QC sample and submit triplicate volume.) Time Type VI (Raw Data Only) Internal COC Required? Yes / No Num תשרונו 1020

Constituents of Concern, Chevron Cincinnati Facility, Interim Measures (IM) Groundwater Monitoring

Volatile Organic Constituents

- . Benzene
- . Chlorobenzene
- . 1,2-Dichlorobenzene
- . 1,3-Dichlorobenzene
- . 1,4-Dichlorobenzene
- Ethylbenzene
- . Toluene
- -Xylenes
- -Xylene -m
- -Xylene -o
- Xylene -p

Metals

Dissolved Lead



Lancaster Laboratories Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

N.D.	none detected	BMQL	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	MPN	Most Probable Number
IU	International Units	CP Units	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	NTU	nephelometric turbidity units
С	degrees Celsius	F	degrees Fahrenheit
Cal	(diet) calories	lb.	pound(s)
meq	milliequivalents	kg	kilogram(s)
g	gram(s)	mg	milligram(s)
ug	microgram(s)	I	liter(s)
ml	milliliter(s)	ul	microliter(s)
m3	cubic meter(s)	fib >5 um/ml	fibers greater than 5 microns in length per ml

- < less than The number following the sign is the <u>limit of quantitation</u>, the smallest amount of analyte which can be reliably determined using this specific test.
- > greater than

ppm parts per million – One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weightBesults printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture.

U.S. EPA data qualifiers:

Organic Qualifiers

Inorganic Qualifiers

Α	TIC is a possible aldol-condensation product	В	Value is <crdl, but="" th="" ≥idl<=""></crdl,>
В	Analyte was also detected in the blank	Ε	Estimated due to interference
С	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quatitated on a diluted sample	N	Spike amount not within control limits
E	Concentration exceeds the calibration range of	S	Method of standard additions (MSA) used
	the instrument		for calculation
J	Estimated value	U	Compound was not detected
N	Presumptive evidence of a compound (TICs only)	W	Post digestion spike out of control limits
Р	Concentration difference between primary and	*	Duplicate analysis not within control limits
	confirmation columns >25%	+	Correlation coefficient for MSA < 0.995
U	Compound was not detected		
X,Y,Z	Defined in case narrative		

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY – In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions of Lancaster Laboratories and we hereby object to any conflicting terms contained in any acceptance or order submitted by client.



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

ANALYTICAL RESULTS

Prepared for:

Chevron PO Box 96 North Bend OH 42052

Prepared by:

Lancaster Laboratories 2425 New Holland Pike Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 1067172. Samples arrived at the laboratory on Wednesday, November 28, 2007. The PO# for this group is 0015007286 and the release number is 50008931.

Client Description	Lancaster Labs Number
MW-134,111907 Grab Water Sample	5221159
MW-132,111907 Grab Water Sample	5221160
MW-133,112007 Grab Water Sample	5221161
MW-131,112007 Grab Water Sample	5221162
MW-35,112007_Unspiked Grab Water Sample	5221163
MW-35,112007MS_Matrix_Spike Grab Water Sample	5221164
MW-35,112007MSD_Matrix_Spike_Dup Grab Water Sample	5221165
MW-35,112007_Duplicate Grab Water Sample	5221166
TRIP BLANK.112707 Water Sample	5221167

METHODOLOGY

1 COPY TO

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

1 COPY TO	Trihydro Corporation	Attn: Chris Aneiros
ELECTRONIC	Trihydro Corporation	Attn: Trihydro Database
COPY TO	-	•

Data Package Group



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Questions? Contact your Client Services Representative Gwen A Birchall at (717) 656-2300

Respectfully Submitted,

Max E. Snavely Senior Specialist

May E Snavely





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5221159

MW-134,111907 Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:11/19/2007 13:15 by DL Account Number: 11494

Submitted: 11/28/2007 09:50 Chevron Reported: 12/09/2007 at 20:12 PO Box 96

Discard: 02/08/2008 North Bend OH 42052

IM134 SDG#: HVO64-01

I 5E w

1	5E W				As Received		
	CAT			As Received	Method		Dilution
	No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
	07055	Lead	7439-92-1	N.D.	0.0069	mg/l	1
	06371	8260 Special Cmpds for Waters					
	05416	m+p-Xylene	n.a.	N.D.	0.8	ug/l	1
	05417	o-Xylene	95-47-6	N.D.	0.8	ug/l	1
	08171	1,3-Dichlorobenzene	541-73-1	N.D.	1.	ug/l	1
	08172	1,4-Dichlorobenzene	106-46-7	N.D.	1.	ug/l	1
	08173	1,2-Dichlorobenzene	95-50-1	N.D.	1.	ug/l	1
	07582	PPL + Xylene (total) by 8260					
	05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
	05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
	05413	Chlorobenzene	108-90-7	N.D.	0.8	ug/l	1
	05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
	06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/07/2007 15:46	Eric L Eby	1
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	12/01/2007 06:50	Kelly E Brickley	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	12/01/2007 06:50	Kelly E Brickley	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/01/2007 06:50	Kelly E Brickley	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	12/03/2007 19:44	James L Mertz	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5221160

MW-132,111907 Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:11/19/2007 15:15 by DL Account Number: 11494

Submitted: 11/28/2007 09:50 Chevron Reported: 12/09/2007 at 20:12 PO Box 96

Discard: 02/08/2008 North Bend OH 42052

IM132 SDG#: HVO64-02

I 5E w

I DE W				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
07055	Lead	7439-92-1	N.D.	0.0069	mg/l	1
06371	8260 Special Cmpds for Waters					
05416	m+p-Xylene	n.a.	N.D.	0.8	ug/l	1
05417	o-Xylene	95-47-6	N.D.	0.8	ug/l	1
08171	1,3-Dichlorobenzene	541-73-1	N.D.	1.	ug/l	1
08172	1,4-Dichlorobenzene	106-46-7	N.D.	1.	ug/l	1
08173	1,2-Dichlorobenzene	95-50-1	N.D.	1.	ug/l	1
07582	PPL + Xylene (total) by 8260					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05413	Chlorobenzene	108-90-7	N.D.	0.8	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			-	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/07/2007 15:49	Eric L Eby	1
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	12/01/2007 07:14	Kelly E Brickley	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	12/01/2007 07:14	Kelly E Brickley	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/01/2007 07:14	Kelly E Brickley	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	12/03/2007 19:44	James L Mertz	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5221161

MW-133,112007 Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:11/20/2007 11:20 by DL Account Number: 11494

Submitted: 11/28/2007 09:50 Chevron Reported: 12/09/2007 at 20:12 PO Box 96

Discard: 02/08/2008 North Bend OH 42052

IM133 SDG#: HVO64-03

I 5E w

1	5E W				As Received		
	CAT			As Received	Method		Dilution
	No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
	07055	Lead	7439-92-1	N.D.	0.0069	mg/l	1
	06371	8260 Special Cmpds for Waters					
	05416	m+p-Xylene	n.a.	N.D.	0.8	ug/l	1
	05417	o-Xylene	95-47-6	N.D.	0.8	ug/l	1
	08171	1,3-Dichlorobenzene	541-73-1	N.D.	1.	ug/l	1
	08172	1,4-Dichlorobenzene	106-46-7	N.D.	1.	ug/l	1
	08173	1,2-Dichlorobenzene	95-50-1	N.D.	1.	ug/l	1
	07582	PPL + Xylene (total) by 8260					
	05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
	05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
	05413	Chlorobenzene	108-90-7	N.D.	0.8	ug/l	1
	05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
	06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			2	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/07/2007 16:00	Eric L Eby	1
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	12/03/2007 02:54	Holly Berry	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	12/03/2007 02:54	Holly Berry	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/03/2007 02:54	Holly Berry	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	12/03/2007 19:44	James L Mertz	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5221162

MW-131,112007 Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:11/20/2007 15:05 by DL Account Number: 11494

Submitted: 11/28/2007 09:50 Chevron Reported: 12/09/2007 at 20:12 PO Box 96

Discard: 02/08/2008 North Bend OH 42052

IM131 SDG#: HVO64-04

I 5E w

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
07055	Lead	7439-92-1	N.D.	0.0069	mg/l	1
06371	8260 Special Cmpds for Waters					
05416	m+p-Xylene	n.a.	N.D.	0.8	ug/l	1
05417	o-Xylene	95-47-6	N.D.	0.8	ug/l	1
08171	1,3-Dichlorobenzene	541-73-1	N.D.	1.	ug/l	1
08172	1,4-Dichlorobenzene	106-46-7	N.D.	1.	ug/l	1
08173	1,2-Dichlorobenzene	95-50-1	N.D.	1.	ug/l	1
07582	PPL + Xylene (total) by 8260					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05413	Chlorobenzene	108-90-7	N.D.	0.8	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/07/2007 16:03	Eric L Eby	1
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	12/03/2007 03:18	Holly Berry	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	12/03/2007 03:18	Holly Berry	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/03/2007 03:18	Holly Berry	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	12/03/2007 19:44	James L Mertz	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5221163

MW-35,112007_Unspiked Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:11/20/2007 13:25 by DL Account Number: 11494

Submitted: 11/28/2007 09:50 Chevron Reported: 12/09/2007 at 20:12 PO Box 96

Discard: 02/08/2008 North Bend OH 42052

IM-35 SDG#: HVO64-05BKG

I 5E v

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
07055	Lead	7439-92-1	N.D.	0.0069	mg/l	1
06371	8260 Special Cmpds for Waters					
05416	m+p-Xylene	n.a.	N.D.	0.8	ug/l	1
05417	o-Xylene	95-47-6	N.D.	0.8	ug/l	1
08171	1,3-Dichlorobenzene	541-73-1	N.D.	1.	ug/l	1
08172	1,4-Dichlorobenzene	106-46-7	N.D.	1.	ug/l	1
08173	1,2-Dichlorobenzene	95-50-1	N.D.	1.	ug/l	1
07582	PPL + Xylene (total) by 8260					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05413	Chlorobenzene	108-90-7	N.D.	0.8	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			2	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/07/2007 15:24	Eric L Eby	1
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	12/03/2007 03:42	Holly Berry	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	12/03/2007 03:42	Holly Berry	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/03/2007 03:42	Holly Berry	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	12/03/2007 19:44	James L Mertz	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5221164

MW-35,112007MS_Matrix_Spike Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:11/20/2007 13:25 by DL Account Number: 11494

Submitted: 11/28/2007 09:50 Chevron Reported: 12/09/2007 at 20:12 PO Box 96

Discard: 02/08/2008 North Bend OH 42052

IM-35 SDG#: HVO64-05MS

I 5E v

I :	bE w				As Received		
C	AT			As Received	Method		Dilution
N	o.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
0'	7055	Lead	7439-92-1	0.128	0.0069	mg/l	1
0	6371	8260 Special Cmpds for Waters					
0	5416	m+p-Xylene	n.a.	41.	0.8	ug/l	1
0	5417	o-Xylene	95-47-6	20.	0.8	ug/l	1
0	8171	1,3-Dichlorobenzene	541-73-1	19.	1.	ug/l	1
0	8172	1,4-Dichlorobenzene	106-46-7	20.	1.	ug/l	1
0	8173	1,2-Dichlorobenzene	95-50-1	19.	1.	ug/l	1
0	7582	PPL + Xylene (total) by 8260					
0	5401	Benzene	71-43-2	22.	0.5	ug/l	1
0	5407	Toluene	108-88-3	22.	0.7	ug/l	1
0	5413	Chlorobenzene	108-90-7	20.	0.8	ug/l	1
0	5415	Ethylbenzene	100-41-4	22.	0.8	ug/l	1
0	6310	Xylene (Total)	1330-20-7	61.	0.8	ug/l	1

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/07/2007 15:35	Eric L Eby	1
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	12/03/2007 04:07	Holly Berry	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	12/03/2007 04:07	Holly Berry	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/03/2007 04:07	Holly Berry	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	12/03/2007 19:44	James L Mertz	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5221165

MW-35,112007MSD_Matrix_Spike_Dup Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:11/20/2007 13:25 by DL Account Number: 11494

Submitted: 11/28/2007 09:50 Chevron Reported: 12/09/2007 at 20:12 PO Box 96

Discard: 02/08/2008 North Bend OH 42052

IM-35 SDG#: HVO64-05MSD

I 5E v

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
07055	Lead	7439-92-1	0.125	0.0069	mg/l	1
06371	8260 Special Cmpds for Waters					
05416	m+p-Xylene	n.a.	42.	0.8	ug/l	1
05417	o-Xylene	95-47-6	21.	0.8	ug/l	1
08171	1,3-Dichlorobenzene	541-73-1	20.	1.	ug/l	1
08172	1,4-Dichlorobenzene	106-46-7	20.	1.	ug/l	1
08173	1,2-Dichlorobenzene	95-50-1	20.	1.	ug/l	1
07582	PPL + Xylene (total) by 8260					
05401	Benzene	71-43-2	23.	0.5	ug/l	1
05407	Toluene	108-88-3	22.	0.7	ug/l	1
05413	Chlorobenzene	108-90-7	21.	0.8	ug/l	1
05415	Ethylbenzene	100-41-4	22.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	62.	0.8	ug/l	1

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
0705	5 Lead	SW-846 6010B	1	12/07/2007 15:39	Eric L Eby	1
0637	1 8260 Special Cmpds for Waters	SW-846 8260B	1	12/03/2007 04:31	Holly Berry	1
0758	PPL + Xylene (total) by 8260	SW-846 8260B	1	12/03/2007 04:31	Holly Berry	1
0116	GC/MS VOA Water Prep	SW-846 5030B	1	12/03/2007 04:31	Holly Berry	1
0184	8 WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	12/03/2007 19:44	James L Mertz	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5221166

MW-35,112007_Duplicate Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:11/20/2007 13:25 by DL Account Number: 11494

Submitted: 11/28/2007 09:50 Chevron Reported: 12/09/2007 at 20:12 PO Box 96

Discard: 02/08/2008 North Bend OH 42052

IM-35 SDG#: HVO64-05DUP

I 5E w

As Received
AT As Received Method

 CAT
 As Received
 Method
 Dilution

 No.
 Analysis Name
 CAS Number
 Result
 Detection
 Units
 Factor

 07055
 Lead
 7439-92-1
 N.D.
 0.0069
 mg/l
 1

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

		_00 0 _ 0 0 0				
CAT			_	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/07/2007 15:32	Eric L Eby	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	12/03/2007 19:44	James L Mertz	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5221167

TRIP_BLANK, 112707 Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:11/27/2007 17:00 Account Number: 11494

Submitted: 11/28/2007 09:50 Chevron Reported: 12/09/2007 at 20:12 PO Box 96

Discard: 02/08/2008 North Bend OH 42052

IMTRB SDG#: HVO64-06TB

I 5E w

. J. w				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
06371	8260 Special Cmpds for Waters					
05416	m+p-Xylene	n.a.	N.D.	0.8	ug/l	1
05417	o-Xylene	95-47-6	N.D.	0.8	ug/l	1
08171	1,3-Dichlorobenzene	541-73-1	N.D.	1.	ug/l	1
08172	1,4-Dichlorobenzene	106-46-7	N.D.	1.	ug/l	1
08173	1,2-Dichlorobenzene	95-50-1	N.D.	1.	ug/l	1
07582	PPL + Xylene (total) by 8260					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05413	Chlorobenzene	108-90-7	N.D.	0.8	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	12/03/2007 02:30	Holly Berry	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	12/03/2007 02:30	Holly Berry	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/03/2007 02:30	Holly Berry	1



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 3

Quality Control Summary

Client Name: Chevron Group Number: 1067172

Reported: 12/09/07 at 08:12 PM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank <u>Result</u>	Blank <u>MDL</u>	Report <u>Units</u>	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 073371848003	·		5221159-52	· <u></u>		·		
Lead	N.D.	0.0069	mg/1	101		90-113		
Batch number: W073342AA	Sample nu	mber(s):	5221159-52	21160				
Benzene	N.D.	0.5	ug/l	99		78-119		
Toluene	N.D.	0.7	ug/l	100		85-115		
Chlorobenzene	N.D.	0.8	ug/l	96		85-115		
Ethylbenzene	N.D.	0.8	ug/l	101		82-119		
m+p-Xylene	N.D.	0.8	ug/l	95		83-113		
o-Xylene	N.D.	0.8	ug/l	95		83-113		
Xylene (Total)	N.D.	0.8	ug/l	95		83-113		
1,3-Dichlorobenzene	N.D.	1.	ug/l	95		81-114		
1,4-Dichlorobenzene	N.D.	1.	ug/l	95		84-116		
1,2-Dichlorobenzene	N.D.	1.	ug/l	94		81-112		
Batch number: W073361AA	Sample nu	mber(s):	5221161-52	21165,522	1167			
Benzene	N.D.	0.5	ug/l	102		78-119		
Toluene	N.D.	0.7	ug/l	100		85-115		
Chlorobenzene	N.D.	0.8	ug/l	95		85-115		
Ethylbenzene	N.D.	0.8	ug/l	99		82-119		
m+p-Xylene	N.D.	0.8	ug/l	93		83-113		
o-Xylene	N.D.	0.8	ug/l	94		83-113		
Xylene (Total)	N.D.	0.8	ug/l	93		83-113		
1,3-Dichlorobenzene	N.D.	1.	ug/l	91		81-114		
1,4-Dichlorobenzene	N.D.	1.	ug/l	91		84-116		
1,2-Dichlorobenzene	N.D.	1.	ug/l	92		81-112		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD <u>Limits</u>	RPD	RPD <u>MAX</u>	BKG Conc	DUP <u>Conc</u>	DUP RPD	Dup RPD <u>Max</u>
Batch number: 073371848003	_						BKG: 5221163		0.0
Lead	106	105	75-125	2	20	N.D.	N.D.	0 (1)	20
Batch number: W073342AA	Sample	number(s)	: 5221159	-522116	0 UNSP	K: P221604			
Benzene	106	106	83-128	0	30				
Toluene	106	106	83-127	0	30				
Chlorobenzene	97	97	83-120	1	30				
Ethylbenzene	105	105	82-129	0	30				
m+p-Xylene	97	98	82-130	1	30				
o-Xylene	98	97	82-130	1	30				
Xylene (Total)	97	98	82-130	0	30				

- *- Outside of specification
- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

EPA ARCHIVE DOCUMENT



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 2 of 3

Quality Control Summary

Client Name: Chevron Group Number: 1067172

Reported: 12/09/07 at 08:12 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike Background (BKG) = the sample used in conjunction with the duplicate

MS	MSD	MS/MSD		RPD	BKG	DUP	DUP	Dup RPD
%REC	%REC	<u>Limits</u>	RPD	MAX	Conc	Conc	RPD	Max
94	94	79-123	1	30				
96	95	81-122	2	30				
95	92	82-117	3	30				
Sample	number(s	s): 5221161	L-52211	65,5221	L167 UNSPK	: 5221163		
112	114	83-128	2	30				
109	112	83-127	3	30				
100	104	83-120	3	30				
109	112	82-129	3	30				
102	104	82-130	2	30				
101	104	82-130	3	30				
102	104	82-130	2	30				
97	98	79-123	1	30				
98	98	81-122	1	30				
96	98	82-117	2	30				
	%REC 94 96 95 Sample 112 109 100 109 102 101 102 97 98	%REC %REC 94 94 96 95 95 92 Sample number(s 112 114 109 112 100 104 109 112 102 104 101 104 102 104 97 98 98 98	%REC %REC Limits 94 94 79-123 96 95 81-122 95 92 82-117 Sample number(s): 5221161 112 114 83-128 109 112 83-127 100 104 83-120 109 112 82-129 102 104 82-130 101 104 82-130 102 104 82-130 97 98 79-123 98 98 81-122	%REC %REC Limits RPD 94 94 79-123 1 96 95 81-122 2 95 92 82-117 3 Sample number(s): 5221161-52211 112 114 83-128 2 109 112 83-127 3 100 104 83-120 3 109 112 82-129 3 102 104 82-130 2 101 104 82-130 3 102 104 82-130 2 97 98 98 99 81-122 1	%REC %REC Limits RPD MAX 94 94 79-123 1 30 96 95 81-122 2 30 95 92 82-117 3 30 Sample number(s): 5221161-5221165,5221 112 114 83-128 2 30 109 112 83-127 3 30 100 104 83-120 3 30 109 112 82-129 3 30 102 104 82-130 2 30 101 104 82-130 2 30 102 104 82-130 2 30 97 98 79-123 1 30 98 98 81-122 1 30	%REC %REC Limits RPD MAX Conc 94 94 79-123 1 30 96 95 81-122 2 30 95 92 82-117 3 30 Sample number(s): 5221161-5221165,5221167 UNSPK 112 114 83-128 2 30 109 112 83-127 3 30 100 104 83-120 3 30 109 112 82-129 3 30 102 104 82-130 2 30 101 104 82-130 2 30 102 104 82-130 2 30 97 98 79-123 1 30 98 98 81-122 1 30	%REC %REC Limits RPD MAX Conc Conc 94 94 79-123 1 30 30 96 95 81-122 2 30 </td <td>%REC %REC Limits RPD MAX Conc Conc RPD 94 94 79-123 1 30 30 95 95 81-122 2 30 30 95 92 82-117 3 30</td>	%REC %REC Limits RPD MAX Conc Conc RPD 94 94 79-123 1 30 30 95 95 81-122 2 30 30 95 92 82-117 3 30

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: PPL + Xylene (total) by 8260

Batch number: W073342AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5221159	91	94	101	96
5221160	91	94	100	95
Blank	90	94	98	93
LCS	92	93	98	96
MS	92	94	100	98
MSD	93	96	101	97
Limits:	80-116	77-113	80-113	78-113

Analysis Name: PPL + Xylene (total) by 8260

Batch number: W073361AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5221161	92	95	98	95
5221162	92	94	98	96
5221163	91	95	98	96
5221164	95	92	99	99
5221165	95	98	98	99
5221167	90	94	97	95
Blank	92	95	97	96
LCS	94	94	98	98
MS	95	92	99	99
MSD	95	98	98	99
Limits:	80-116	77-113	80-113	78-113

- *- Outside of specification
- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 3

Quality Control Summary

Client Name: Chevron Group Number: 1067172

Reported: 12/09/07 at 08:12 PM

Surrogate Quality Control

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Analysis Request/ Environmental Services Chain of Custody



For Lancaster Laboratories use only

Group#/067172 sample #5221159-67 COC # 0165355

Laboratories	Please print. Ins	tructions o	on reverse	side co	orrespor	nd with cire	cled numb	ers. CC	poler len	100.8°C a For Lab Use Only
1) Curuland - Consideration			Matel			(5)	Analyse reservat	s Reque	sted	FSC: SCR#: 50673
Client: CHEVRON - CINCINNATI Project Name/#: ZNO 2007 SAM GR				$\frac{1}{4}$) H					Preservation Codes H=HCl T=Thiosulfate 6
Project Manager: Duc CAM										N=HNO ₃ B=NaOH S=H ₂ SO ₄ O=Other
Sampler: DuG LAm Name of state where samples were collect	Quote #:				8260	LEAO				
2) Sample identification	Date Time Collected Collected	Gomposifi	Soil as Water	Other	PPL VOC					Remarks
MW-134, 11907	11/19/07 1315	X	X	4	} ×					SE MACHED MN LIST
MW-132, 111907	11/19/07 1515	X	×	4						LE MINE
MW-133, 112007 MW-131, 112007	11/20/07 1120	X	X	.a. I.,		X				MALIST
MW-35, 112007	11/20/07 1325	×	X	4	ŁX	X	\perp			
MU-35 MS/MSD, 112007 TRIP BLANK, 112707	11/20/07 1325	X	X	2		X				ms/msd samples -
THE CONTRACTOR	1190907 1700									Note: Dissoluto LEAD
		<u> </u>		$\downarrow \downarrow$						SAMPLES WERE FIELD
Turnaround Time Requested (TAT) (ple (Rush TAT is subject to Lancaster Laboratories Date results are needed: DEC 15, 2	approval and surcharge.)	Reli	nquisited	py.	L	1 / c	Date 2 - 30 - 0	Time	Received by	
Rush results requested by (please circle): Phone #: 513 - 353 - 1323 Fax #	Phone Fax E-mail:		duished	W.	X			60 200		
E-mail address: dametrihydro.c Data Package Options (please circle if req		— "	quished	by:	V		Date	Time	Received by	Date Time
Type I (validation/NJ Reg) TX TRRP-13 Type II (Tiex II) MA MCP	CT RCP Yes No	<u> </u>	nquished	by:			Date	Time	Received by	Date Time
Type IV (CLP SOW) (If yes, indicate QC serv	QC (MS/MSD/Dup)? Yes No le and submit triplicate volume.) C Required? Yes No	Reli	nguished	by:			Date	Time	Received by	Date Time 11-38 095

Constituents of Concern, Chevron Cincinnati Facility, Interim Measures (IM) Groundwater Monitoring

Volatile Organic Constituents

Benzene V

Chlorobenzene 🗸

1,2-Dichlorobenzene 🗸

1,3-Dichlorobenzene ✓

1,4-Dichlorobenzene 🗸

Ethylbenzene /

Toluene/

Xylenes √

Xylene -m√

Xylene -o ✓

Xylene -p ✓

<u>Metals</u>

Dissolved Lead

Lancaster Laboratories Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

N.D.	none detected	BMQL	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	MPN	Most Probable Number
IU	International Units	CP Units	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	NTU	nephelometric turbidity units
С	degrees Celsius	F	degrees Fahrenheit
Cal	(diet) calories	lb.	pound(s)
meq	milliequivalents	kg	kilogram(s)
g	gram(s)	mg	milligram(s)
ug	microgram(s)	Ī	liter(s)
ml	milliliter(s)	ul	microliter(s)
m3	cubic meter(s)	fib >5 um/ml	fibers greater than 5 microns in length per ml

- < less than The number following the sign is the <u>limit of quantitation</u>, the smallest amount of analyte which can be reliably determined using this specific test.
- > greater than
- ppm parts per million One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

Inorganic Qualifiers

- ppb parts per billion
- **Dry weight**Besults printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture.

U.S. EPA data qualifiers:

Organic Qualifiers

Α TIC is a possible aldol-condensation product Value is <CRDL, but ≥IDL В Е Analyte was also detected in the blank Estimated due to interference С Pesticide result confirmed by GC/MS Duplicate injection precision not met M D Compound quatitated on a diluted sample Ν Spike amount not within control limits Ε Concentration exceeds the calibration range of S Method of standard additions (MSA) used the instrument for calculation J Estimated value U Compound was not detected Ν Presumptive evidence of a compound (TICs only) W Post digestion spike out of control limits Ρ Concentration difference between primary and Duplicate analysis not within control limits confirmation columns >25% Correlation coefficient for MSA < 0.995 U Compound was not detected X,Y,ZDefined in case narrative

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY – In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions of Lancaster Laboratories and we hereby object to any conflicting terms contained in any acceptance or order submitted by client.



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

ANALYTICAL RESULTS

Prepared for:

Chevron PO Box 96 North Bend OH 42052

Prepared by:

Lancaster Laboratories 2425 New Holland Pike Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 1067775. Samples arrived at the laboratory on Saturday, December 01, 2007. The PO# for this group is 0015007286 and the release number is 50008931.

Client Description	<u>Lancaster Labs Number</u>
MW-37,112707 Grab Water Sample	5225483
MW-114,112707 Grab Water Sample	5225484
MW-94S,112707 Grab Water Sample	5225485
MW-48D,112807 Grab Water Sample	5225486
MW-48S,112807 Grab Water Sample	5225487
MW-48I,112807 Grab Water Sample	5225488
ER1,112907 Grab Water Sample	5225489
MW-128,112907 Grab Water Sample	5225490
MW-115D,112907 Grab Water Sample	5225491
MW-115S,112907 Grab Water Sample	5225492
MW-81D,113007 Grab Water Sample	5225493
MW-81S,113007 Grab Water Sample	5225494
MW-101,113007 Grab Water Sample	5225495
MW-7,113007 Grab Water Sample	5225496
BD2,112807 Grab Water Sample	5225497
BD3,113007 Grab Water Sample	5225498
TripBlank,113007 Water Sample	5225499

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

1 COPY TO ELECTRONIC COPY TO 1 COPY TO ELECTRONIC

COPY TO

Trihydro Corporation Trihydro Corporation

Data Package Group Trihydro Corporation Attn: Chris Aneiros Attn: Trihydro Database

Attn: Doug Lam

Questions? Contact your Client Services Representative Gwen A Birchall at (717) 656-2300

Respectfully Submitted,

Christine Dulaney Senior Specialist





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5225483

MW-37,112707 Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:11/27/2007 11:10 by DL Account Number: 11494

Submitted: 12/01/2007 11:00 Chevron Reported: 12/17/2007 at 12:55 PO Box 96

Discard: 02/16/2008 North Bend OH 42052

MW37- SDG#: HVO64-07

I 5E w

I DE W				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
07055	Lead	7439-92-1	N.D.	0.0069	mg/l	1
06371	8260 Special Cmpds for Waters					
05416	m+p-Xylene	n.a.	N.D.	0.8	ug/l	1
05417	o-Xylene	95-47-6	N.D.	0.8	ug/l	1
08171	1,3-Dichlorobenzene	541-73-1	N.D.	1.	ug/l	1
08172	1,4-Dichlorobenzene	106-46-7	N.D.	1.	ug/l	1
08173	1,2-Dichlorobenzene	95-50-1	N.D.	1.	ug/l	1
07582	PPL + Xylene (total) by 8260					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05413	Chlorobenzene	108-90-7	N.D.	0.8	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

This sample was filtered in the field for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			2	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/12/2007 19:15	John P Hook	1
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	12/06/2007 03:55	Sara E Wolf	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	12/06/2007 03:55	Sara E Wolf	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/06/2007 03:55	Sara E Wolf	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	12/04/2007 23:45	Helen L Schaeffer	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5225484

MW-114,112707 Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:11/27/2007 14:00 by DL Account Number: 11494

Submitted: 12/01/2007 11:00 Chevron Reported: 12/17/2007 at 12:55 PO Box 96

Discard: 02/16/2008 North Bend OH 42052

MW114 SDG#: HVO64-08

I 5E w

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
07055	Lead	7439-92-1	N.D.	0.0069	mg/l	1
06371	8260 Special Cmpds for Waters					
05416	m+p-Xylene	n.a.	N.D.	0.8	ug/l	1
05417	o-Xylene	95-47-6	N.D.	0.8	ug/l	1
08171	1,3-Dichlorobenzene	541-73-1	N.D.	1.	ug/l	1
08172	1,4-Dichlorobenzene	106-46-7	N.D.	1.	ug/l	1
08173	1,2-Dichlorobenzene	95-50-1	N.D.	1.	ug/l	1
07582	PPL + Xylene (total) by 8260					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05413	Chlorobenzene	108-90-7	N.D.	0.8	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

This sample was filtered in the field for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			2	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/12/2007 19:37	John P Hook	1
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	12/06/2007 04:17	Sara E Wolf	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	12/06/2007 04:17	Sara E Wolf	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/06/2007 04:17	Sara E Wolf	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	12/04/2007 23:45	Helen L Schaeffer	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5225485

MW-94S,112707 Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:11/27/2007 15:30 by DL Account Number: 11494

Submitted: 12/01/2007 11:00 Chevron Reported: 12/17/2007 at 12:55 PO Box 96

Discard: 02/16/2008 North Bend OH 42052

MW94S SDG#: HV064-09

I 5E w

I PE W				As Received		
CAT			As Receive			Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
07055	Lead	7439-92-1	N.D.	0.0069	mg/l	1
06371	8260 Special Cmpds for Waters					
05416	m+p-Xylene	n.a.	N.D.	0.8	ug/l	1
05417	o-Xylene	95-47-6	N.D.	0.8	ug/l	1
08171	1,3-Dichlorobenzene	541-73-1	N.D.	1.	ug/l	1
08172	1,4-Dichlorobenzene	106-46-7	N.D.	1.	ug/l	1
08173	1,2-Dichlorobenzene	95-50-1	N.D.	1.	ug/l	1
07582	PPL + Xylene (total) by 8260					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05413	Chlorobenzene	108-90-7	N.D.	0.8	ug/l	1
05415	Ethylbenzene	100-41-4	4. J	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

This sample was filtered in the field for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			2	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/12/2007 19:41	John P Hook	1
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	12/06/2007 05:01	Sara E Wolf	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	12/06/2007 05:01	Sara E Wolf	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/06/2007 05:01	Sara E Wolf	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	12/04/2007 23:45	Helen L Schaeffer	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5225486

MW-48D,112807 Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:11/28/2007 13:50 by DL Account Number: 11494

Submitted: 12/01/2007 11:00 Chevron Reported: 12/17/2007 at 12:55 PO Box 96

Discard: 02/16/2008 North Bend OH 42052

MW48D SDG#: HV064-10

I 5E w

T 2E /	N			As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
0705	5 Lead	7439-92-1	N.D.	0.0069	mg/l	1
0637	1 8260 Special Cmpds for Waters					
0541	6 m+p-Xylene	n.a.	N.D.	0.8	ug/l	1
0541	7 o-Xylene	95-47-6	N.D.	0.8	ug/l	1
0817	1 1,3-Dichlorobenzene	541-73-1	N.D.	1.	ug/l	1
0817	2 1,4-Dichlorobenzene	106-46-7	N.D.	1.	ug/l	1
0817	3 1,2-Dichlorobenzene	95-50-1	N.D.	1.	ug/l	1
0758	2 PPL + Xylene (total) by 8260					
0540	1 Benzene	71-43-2	N.D.	0.5	ug/l	1
0540	7 Toluene	108-88-3	N.D.	0.7	ug/l	1
0541	3 Chlorobenzene	108-90-7	N.D.	0.8	ug/l	1
0541	5 Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
0631	0 Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

This sample was filtered in the field for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT		_	-	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/12/2007 19:51	John P Hook	1
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	12/06/2007 04:39	Sara E Wolf	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	12/06/2007 04:39	Sara E Wolf	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/06/2007 04:39	Sara E Wolf	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	12/04/2007 23:45	Helen L Schaeffer	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5225487

MW-48S,112807 Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:11/28/2007 14:40 by DL Account Number: 11494

Submitted: 12/01/2007 11:00 Chevron Reported: 12/17/2007 at 12:55 PO Box 96

Discard: 02/16/2008 North Bend OH 42052

MW48S SDG#: HVO64-11

I 5E w

I DE W					As Received		
CAT			As Re	ceived	Method		Dilution
No.	Analysis Name	CAS Number	Resul	t	Detection Limit	Units	Factor
07055	Lead	7439-92-1	N.D.		0.0069	mg/l	1
06371	8260 Special Cmpds for Waters						
05416	m+p-Xylene	n.a.	190.		0.8	ug/l	1
05417	o-Xylene	95-47-6	23.		0.8	ug/l	1
08171	1,3-Dichlorobenzene	541-73-1	N.D.		1.	ug/l	1
08172	1,4-Dichlorobenzene	106-46-7	N.D.		1.	ug/l	1
08173	1,2-Dichlorobenzene	95-50-1	N.D.		1.	ug/l	1
07582	PPL + Xylene (total) by 8260						
05401	Benzene	71-43-2	2.	J	0.5	ug/l	1
05407	Toluene	108-88-3	1.	J	0.7	ug/l	1
05413	Chlorobenzene	108-90-7	N.D.		0.8	ug/l	1
05415	Ethylbenzene	100-41-4	9.		0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	210.		0.8	ug/l	1

This sample was filtered in the field for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			-	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/12/2007 19:55	John P Hook	1
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	12/06/2007 10:54	Stephanie A Selis	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	12/06/2007 10:54	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/06/2007 10:54	Stephanie A Selis	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	12/04/2007 23:45	Helen L Schaeffer	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5225488

MW-48I,112807 Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:11/28/2007 16:10 by DL Account Number: 11494

Submitted: 12/01/2007 11:00 Chevron Reported: 12/17/2007 at 12:55 PO Box 96

Discard: 02/16/2008 North Bend OH 42052

MW48I SDG#: HVO64-12

I 5E w

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
07055	Lead	7439-92-1	N.D.	0.0069	mg/l	1
06371	8260 Special Cmpds for Waters					
05416	m+p-Xylene	n.a.	N.D.	0.8	ug/l	1
05417	o-Xylene	95-47-6	N.D.	0.8	ug/l	1
08171	1,3-Dichlorobenzene	541-73-1	N.D.	1.	ug/l	1
08172	1,4-Dichlorobenzene	106-46-7	N.D.	1.	ug/l	1
08173	1,2-Dichlorobenzene	95-50-1	N.D.	1.	ug/l	1
07582	PPL + Xylene (total) by 8260					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05413	Chlorobenzene	108-90-7	N.D.	0.8	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

This sample was filtered in the field for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/12/2007 19:58	John P Hook	1
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	12/06/2007 11:39	Stephanie A Selis	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	12/06/2007 11:39	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/06/2007 11:39	Stephanie A Selis	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	12/04/2007 23:45	Helen L Schaeffer	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5225489

ER1,112907 Grab Water Sample
Interim Measures (IM) Groundwater Monitoring

Collected:11/29/2007 by DL Account Number: 11494

Submitted: 12/01/2007 11:00 Chevron Reported: 12/17/2007 at 12:55 PO Box 96

Discard: 02/16/2008 North Bend OH 42052

ER1-- SDG#: HVO64-13EB

I 5E w

I 5E W				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
07055	Lead	7439-92-1	N.D.	0.0069	mg/l	1
06371	8260 Special Cmpds for Waters					
05416	m+p-Xylene	n.a.	N.D.	0.8	ug/l	1
05417	o-Xylene	95-47-6	N.D.	0.8	ug/l	1
08171	1,3-Dichlorobenzene	541-73-1	N.D.	1.	ug/l	1
08172	1,4-Dichlorobenzene	106-46-7	N.D.	1.	ug/l	1
08173	1,2-Dichlorobenzene	95-50-1	N.D.	1.	ug/l	1
07582	PPL + Xylene (total) by 8260					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05413	Chlorobenzene	108-90-7	N.D.	0.8	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

This sample was filtered in the field for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/12/2007 20:02	John P Hook	1
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	12/06/2007 12:01	Stephanie A Selis	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	12/06/2007 12:01	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/06/2007 12:01	Stephanie A Selis	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	12/04/2007 23:45	Helen L Schaeffer	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5225490

MW-128,112907 Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:11/29/2007 11:50 by DL Account Number: 11494

Submitted: 12/01/2007 11:00 Chevron Reported: 12/17/2007 at 12:55 PO Box 96

Discard: 02/16/2008 North Bend OH 42052

MW128 SDG#: HVO64-14

I 5E w

I 5E W					As Received		
CAT			As Rec	eived	Method		Dilution
No.	Analysis Name	CAS Number	Result		Detection Limit	Units	Factor
07055	Lead	7439-92-1	N.D.		0.0069	mg/l	1
06371	8260 Special Cmpds for Waters						
05416	m+p-Xylene	n.a.	16.		0.8	ug/l	1
05417	o-Xylene	95-47-6	0.9	J	0.8	ug/l	1
08171	1,3-Dichlorobenzene	541-73-1	N.D.		1.	ug/l	1
08172	1,4-Dichlorobenzene	106-46-7	N.D.		1.	ug/l	1
08173	1,2-Dichlorobenzene	95-50-1	N.D.		1.	ug/l	1
07582	PPL + Xylene (total) by 8260						
05401	Benzene	71-43-2	2.	J	0.5	ug/l	1
05407	Toluene	108-88-3	2.	J	0.7	ug/l	1
05413	Chlorobenzene	108-90-7	N.D.		0.8	ug/l	1
05415	Ethylbenzene	100-41-4	8.		0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	17.		0.8	ug/l	1

This sample was filtered in the field for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CA	ΔT			Analysis		Dilution
No	. Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07	'055 Lead	SW-846 6010B	1	12/12/2007 20:06	John P Hook	1
06	371 8260 Special Cmpds for Waters	SW-846 8260B	1	12/06/2007 12:23	Stephanie A Selis	1
07	7582 PPL + Xylene (total) by 8260	SW-846 8260B	1	12/06/2007 12:23	Stephanie A Selis	1
01	.163 GC/MS VOA Water Prep	SW-846 5030B	1	12/06/2007 12:23	Stephanie A Selis	1
01	.848 WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	12/04/2007 23:45	Helen L Schaeffer	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5225491

MW-115D,112907 Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:11/29/2007 14:20 by DL Account Number: 11494

Submitted: 12/01/2007 11:00 Chevron Reported: 12/17/2007 at 12:55 PO Box 96

Discard: 02/16/2008 North Bend OH 42052

M115D SDG#: HVO64-15

I 5E w

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
07055	Lead	7439-92-1	N.D.	0.0069	mg/l	1
06371	8260 Special Cmpds for Waters					
05416	m+p-Xylene	n.a.	N.D.	0.8	ug/l	1
05417	o-Xylene	95-47-6	N.D.	0.8	ug/l	1
08171	1,3-Dichlorobenzene	541-73-1	N.D.	1.	ug/l	1
08172	1,4-Dichlorobenzene	106-46-7	N.D.	1.	ug/l	1
08173	1,2-Dichlorobenzene	95-50-1	N.D.	1.	ug/l	1
07582	PPL + Xylene (total) by 8260					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05413	Chlorobenzene	108-90-7	N.D.	0.8	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

This sample was filtered in the field for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			2	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/12/2007 20:09	John P Hook	1
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	12/06/2007 13:08	Stephanie A Selis	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	12/06/2007 13:08	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/06/2007 13:08	Stephanie A Selis	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	12/04/2007 23:45	Helen L Schaeffer	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5225492

MW-115S,112907 Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:11/29/2007 15:10 by DL Account Number: 11494

Submitted: 12/01/2007 11:00 Chevron Reported: 12/17/2007 at 12:55 PO Box 96

Discard: 02/16/2008 North Bend OH 42052

M115S SDG#: HVO64-16

I 5E w

I DE W					As Received		
CAT			As Re	ceived	Method		Dilution
No.	Analysis Name	CAS Number	Resul	t	Detection Limit	Units	Factor
07055	Lead	7439-92-1	N.D.		0.0069	mg/l	1
06371	8260 Special Cmpds for Waters						
05416	m+p-Xylene	n.a.	0.8	J	0.8	ug/l	1
05417	o-Xylene	95-47-6	N.D.		0.8	ug/l	1
08171	1,3-Dichlorobenzene	541-73-1	N.D.		1.	ug/l	1
08172	1,4-Dichlorobenzene	106-46-7	N.D.		1.	ug/l	1
08173	1,2-Dichlorobenzene	95-50-1	N.D.		1.	ug/l	1
07582	PPL + Xylene (total) by 8260						
05401	Benzene	71-43-2	7.		0.5	ug/l	1
05407	Toluene	108-88-3	1.	J	0.7	ug/l	1
05413	Chlorobenzene	108-90-7	N.D.		0.8	ug/l	1
05415	Ethylbenzene	100-41-4	0.9	J	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	0.8	J	0.8	ug/l	1

This sample was filtered in the field for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/12/2007 20:13	John P Hook	1
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	12/06/2007 00:56	Sara E Wolf	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	12/06/2007 00:56	Sara E Wolf	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/06/2007 00:56	Sara E Wolf	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	12/04/2007 23:45	Helen L Schaeffer	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5225493

MW-81D,113007 Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:11/30/2007 11:10 by DL Account Number: 11494

Submitted: 12/01/2007 11:00 Chevron Reported: 12/17/2007 at 12:55 PO Box 96

Discard: 02/16/2008 North Bend OH 42052

MW81D SDG#: HVO64-17

I 5E w

I DE W				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
07055	Lead	7439-92-1	N.D.	0.0069	mg/l	1
06371	8260 Special Cmpds for Waters					
05416	m+p-Xylene	n.a.	N.D.	0.8	ug/l	1
05417	o-Xylene	95-47-6	N.D.	0.8	ug/l	1
08171	1,3-Dichlorobenzene	541-73-1	N.D.	1.	ug/l	1
08172	1,4-Dichlorobenzene	106-46-7	N.D.	1.	ug/l	1
08173	1,2-Dichlorobenzene	95-50-1	N.D.	1.	ug/l	1
07582	PPL + Xylene (total) by 8260					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05413	Chlorobenzene	108-90-7	N.D.	0.8	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

This sample was filtered in the field for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/12/2007 20:16	John P Hook	1
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	12/06/2007 01:18	Sara E Wolf	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	12/06/2007 01:18	Sara E Wolf	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/06/2007 01:18	Sara E Wolf	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	12/04/2007 23:45	Helen L Schaeffer	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5225494

MW-81S,113007 Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:11/30/2007 12:10 by DL Account Number: 11494

Submitted: 12/01/2007 11:00 Chevron Reported: 12/17/2007 at 12:55 PO Box 96

Discard: 02/16/2008 North Bend OH 42052

MW81S SDG#: HVO64-18

I 5E w

I PE M					As Received		
CAT			As Rec	eived	Method		Dilution
No.	Analysis Name	CAS Number	Result		Detection Limit	Units	Factor
07055	Lead	7439-92-1	N.D.		0.0069	mg/l	1
06371	8260 Special Cmpds for Waters						
05416	m+p-Xylene	n.a.	47.		0.8	ug/l	1
05417	o-Xylene	95-47-6	1.	J	0.8	ug/l	1
08171	1,3-Dichlorobenzene	541-73-1	N.D.		1.	ug/l	1
08172	1,4-Dichlorobenzene	106-46-7	N.D.		1.	ug/l	1
08173	1,2-Dichlorobenzene	95-50-1	N.D.		1.	ug/l	1
07582	PPL + Xylene (total) by 8260						
05401	Benzene	71-43-2	67.		0.5	ug/l	1
05407	Toluene	108-88-3	3.	J	0.7	ug/l	1
05413	Chlorobenzene	108-90-7	N.D.		0.8	ug/l	1
05415	Ethylbenzene	100-41-4	49.		0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	48.		0.8	ug/l	1

This sample was filtered in the field for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			4	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/12/2007 20:20	John P Hook	1
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	12/06/2007 02:25	Sara E Wolf	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	12/06/2007 02:25	Sara E Wolf	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/06/2007 02:25	Sara E Wolf	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	12/04/2007 23:45	Helen L Schaeffer	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5225495

MW-101,113007 Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:11/30/2007 14:20 by DL Account Number: 11494

Submitted: 12/01/2007 11:00 Chevron Reported: 12/17/2007 at 12:55 PO Box 96

Discard: 02/16/2008 North Bend OH 42052

MW101 SDG#: HVO64-19

I 5E w

I !	oE W					As Received		
C	AT			As Rec	eived	Method		Dilution
N	٥.	Analysis Name	CAS Number	Result	1	Detection Limit	Units	Factor
0	7055	Lead	7439-92-1	N.D.		0.0069	mg/l	1
0	6371	8260 Special Cmpds for Waters						
0	5416	m+p-Xylene	n.a.	1.	J	0.8	ug/l	1
0	5417	o-Xylene	95-47-6	N.D.		0.8	ug/l	1
0	8171	1,3-Dichlorobenzene	541-73-1	N.D.		1.	ug/l	1
0	8172	1,4-Dichlorobenzene	106-46-7	N.D.		1.	ug/l	1
0	8173	1,2-Dichlorobenzene	95-50-1	N.D.		1.	ug/l	1
0'	7582	PPL + Xylene (total) by 8260						
0	5401	Benzene	71-43-2	N.D.		0.5	ug/l	1
0	5407	Toluene	108-88-3	N.D.		0.7	ug/l	1
0	5413	Chlorobenzene	108-90-7	N.D.		0.8	ug/l	1
0	5415	Ethylbenzene	100-41-4	3.	J	0.8	ug/l	1
0	6310	Xylene (Total)	1330-20-7	1.	J	0.8	ug/l	1

This sample was filtered in the field for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/12/2007 20:24	John P Hook	1
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	12/06/2007 01:40	Sara E Wolf	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	12/06/2007 01:40	Sara E Wolf	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/06/2007 01:40	Sara E Wolf	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	12/04/2007 23:45	Helen L Schaeffer	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5225496

MW-7,113007 Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:11/30/2007 15:25 by DL Account Number: 11494

Submitted: 12/01/2007 11:00 Chevron Reported: 12/17/2007 at 12:55 PO Box 96

Discard: 02/16/2008 North Bend OH 42052

MW-7- SDG#: HVO64-20

I 5E w

I SE	w				As Received		
CAT			As Red	ceived	Method		Dilution
No.	Analysis Name	CAS Number	Result	t	Detection Limit	Units	Factor
0705	5 Lead	7439-92-1	N.D.		0.0069	mg/l	1
0637	1 8260 Special Cmpds for Waters						
0541	6 m+p-Xylene	n.a.	8.		0.8	ug/l	1
0541	7 o-Xylene	95-47-6	1.	J	0.8	ug/l	1
0817	1 1,3-Dichlorobenzene	541-73-1	N.D.		1.	ug/l	1
0817	2 1,4-Dichlorobenzene	106-46-7	N.D.		1.	ug/l	1
0817	3 1,2-Dichlorobenzene	95-50-1	N.D.		1.	ug/l	1
0758	2 PPL + Xylene (total) by 8260						
0540	1 Benzene	71-43-2	16.		0.5	ug/l	1
0540	7 Toluene	108-88-3	1.	J	0.7	ug/l	1
0541	3 Chlorobenzene	108-90-7	N.D.		0.8	ug/l	1
0541	5 Ethylbenzene	100-41-4	1.	J	0.8	ug/l	1
0631	0 Xylene (Total)	1330-20-7	9.		0.8	ug/l	1

This sample was filtered in the field for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			2	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/12/2007 20:34	John P Hook	1
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	12/06/2007 03:10	Sara E Wolf	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	12/06/2007 03:10	Sara E Wolf	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/06/2007 03:10	Sara E Wolf	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	12/04/2007 23:45	Helen L Schaeffer	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5225497

BD2,112807 Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:11/28/2007 by DL Account Number: 11494

Submitted: 12/01/2007 11:00 Chevron Reported: 12/17/2007 at 12:55 PO Box 96

Discard: 02/16/2008 North Bend OH 42052

-BD2- SDG#: HVO64-21FD

I 5E w

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
07055	Lead	7439-92-1	N.D.	0.0069	mg/l	1
06371	8260 Special Cmpds for Waters					
05416	m+p-Xylene	n.a.	N.D.	0.8	ug/l	1
05417	o-Xylene	95-47-6	N.D.	0.8	ug/l	1
08171	1,3-Dichlorobenzene	541-73-1	N.D.	1.	ug/l	1
08172	1,4-Dichlorobenzene	106-46-7	N.D.	1.	ug/l	1
08173	1,2-Dichlorobenzene	95-50-1	N.D.	1.	ug/l	1
07582	PPL + Xylene (total) by 8260					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05413	Chlorobenzene	108-90-7	N.D.	0.8	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

This sample was filtered in the field for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			2	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/12/2007 20:38	John P Hook	1
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	12/06/2007 02:03	Sara E Wolf	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	12/06/2007 02:03	Sara E Wolf	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/06/2007 02:03	Sara E Wolf	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	12/04/2007 23:45	Helen L Schaeffer	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5225498

BD3,113007 Grab Water Sample
Interim Measures (IM) Groundwater Monitoring

Collected:11/30/2007 by DL Account Number: 11494

Submitted: 12/01/2007 11:00 Chevron Reported: 12/17/2007 at 12:55 PO Box 96

Discard: 02/16/2008 North Bend OH 42052

-BD3- SDG#: HVO64-22FD

I 5E w

					As Received		
CAT			As Rec	eived	Method		Dilution
No.	Analysis Name	CAS Number	Result		Detection Limit	Units	Factor
07055	Lead	7439-92-1	N.D.		0.0069	mg/l	1
06371	8260 Special Cmpds for Waters						
05416	m+p-Xylene	n.a.	12.		0.8	ug/l	1
05417	o-Xylene	95-47-6	2.	J	0.8	ug/l	1
08171	1,3-Dichlorobenzene	541-73-1	N.D.		1.	ug/l	1
08172	1,4-Dichlorobenzene	106-46-7	N.D.		1.	ug/l	1
08173	1,2-Dichlorobenzene	95-50-1	N.D.		1.	ug/l	1
07582	PPL + Xylene (total) by 8260						
05401	Benzene	71-43-2	28.		0.5	ug/l	1
05407	Toluene	108-88-3	2.	J	0.7	ug/l	1
05413	Chlorobenzene	108-90-7	N.D.		0.8	ug/l	1
05415	Ethylbenzene	100-41-4	2.	J	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	15.		0.8	ug/l	1

This sample was filtered in the field for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			4	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/12/2007 20:42	John P Hook	1
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	12/06/2007 02:47	Sara E Wolf	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	12/06/2007 02:47	Sara E Wolf	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/06/2007 02:47	Sara E Wolf	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	12/04/2007 23:45	Helen L Schaeffer	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5225499

TripBlank,113007 Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:11/30/2007 Account Number: 11494

Submitted: 12/01/2007 11:00 Chevron Reported: 12/17/2007 at 12:55 PO Box 96

Discard: 02/16/2008 North Bend OH 42052

IMGTB SDG#: HVO64-23TB*

I 5E w

1 3E W				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
06371	8260 Special Cmpds for Waters					
05416	m+p-Xylene	n.a.	N.D.	0.8	ug/l	1
05417	o-Xylene	95-47-6	N.D.	0.8	ug/l	1
08171	1,3-Dichlorobenzene	541-73-1	N.D.	1.	ug/l	1
08172	1,4-Dichlorobenzene	106-46-7	N.D.	1.	ug/l	1
08173	1,2-Dichlorobenzene	95-50-1	N.D.	1.	ug/l	1
07582	PPL + Xylene (total) by 8260					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05413	Chlorobenzene	108-90-7	N.D.	0.8	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	12/06/2007 00:34	Sara E Wolf	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	12/06/2007 00:34	Sara E Wolf	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/06/2007 00:34	Sara E Wolf	1



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 1 of 3

Quality Control Summary

Client Name: Chevron Group Number: 1067775

Reported: 12/17/07 at 12:55 PM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank <u>Result</u>	Blank <u>MDL</u>	Report <u>Units</u>	LCS %REC	LCSD %REC	LCS/LCSD <u>Limits</u>	RPD	RPD Max
Batch number: 073381848006			5225483-52					
Lead	N.D.	0.0069	mg/l	104		90-113		
Batch number: L073391AA	Sample num	mber(s):	5225483-52	25486,5225	5492-52254	99		
Benzene	N.D.	0.5	ug/l	98		78-119		
Toluene	N.D.	0.7	ug/l	98		85-115		
Chlorobenzene	N.D.	0.8	ug/l	97		85-115		
Ethylbenzene	N.D.	0.8	ug/l	96		82-119		
m+p-Xylene	N.D.	0.8	ug/l	97		83-113		
o-Xylene	N.D.	0.8	ug/l	97		83-113		
Xylene (Total)	N.D.	0.8	ug/l	97		83-113		
1,3-Dichlorobenzene	N.D.	1.	ug/l	95		81-114		
1,4-Dichlorobenzene	N.D.	1.	ug/l	94		84-116		
1,2-Dichlorobenzene	N.D.	1.	ug/l	94		81-112		
Batch number: L073401AA	Sample num	mber(s):	5225487-52	25491				
Benzene	N.D.	0.5	ug/l	94		78-119		
Toluene	N.D.	0.7	ug/l	95		85-115		
Chlorobenzene	N.D.	0.8	ug/l	93		85-115		
Ethylbenzene	N.D.	0.8	ug/l	94		82-119		
m+p-Xylene	N.D.	0.8	ug/l	95		83-113		
o-Xylene	N.D.	0.8	ug/l	96		83-113		
Xylene (Total)	N.D.	0.8	ug/l	95		83-113		
1,3-Dichlorobenzene	N.D.	1.	ug/l	93		81-114		
1,4-Dichlorobenzene	N.D.	1.	ug/l	92		84-116		
1,2-Dichlorobenzene	N.D.	1.	ug/l	92		81-112		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS <u>%REC</u>	MSD %REC	MS/MSD <u>Limits</u>	RPD	RPD <u>MAX</u>	BKG <u>Conc</u>	DUP <u>Conc</u>	DUP <u>RPD</u>	Dup RPD Max
Batch number: 073381848006 Lead	Sample 106	number(s) 108	: 5225483 75-125	-52254! 2	98 UNSE 20	PK: 5225483 N.D.	BKG: 52254 N.D.	0 (1)	20
Batch number: L073391AA Benzene Toluene Chlorobenzene Ethylbenzene m+p-Xylene o-Xylene Xylene (Total)	Sample 101 105 99 102 103 111 106	number(s) 101 104 99 101 102 112 105	: 5225483 83-128 83-127 83-120 82-129 82-130 82-130 82-130	-522548 0 1 0 1 1 0 0 0 0	30 30 30 30 30 30 30 30 30 30	5492-522549	9 UNSPK: P2	25844	

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

EPA ARCHIVE DOCUMENT



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 2 of 3

Quality Control Summary

Client Name: Chevron Group Number: 1067775

Reported: 12/17/07 at 12:55 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike Background (BKG) = the sample used in conjunction with the duplicate

	MS	MSD	MS/MSD		RPD	BKG	DOP	DOP	Dup RPD
<u>Analysis Name</u>	%REC	%REC	<u>Limits</u>	RPD	<u>MAX</u>	Conc	Conc	RPD	Max
1,3-Dichlorobenzene	98	97	79-123	1	30				
1,4-Dichlorobenzene	98	97	81-122	1	30				
1,2-Dichlorobenzene	99	96	82-117	3	30				
Batch number: L073401AA	Sample	number(s	s): 522548	7-52254	91 UNSI	PK: P222156			
Benzene	107	109	83-128	1	30				
Toluene	105	107	83-127	2	30				
Chlorobenzene	173*	176*	83-120	1	30				
Ethylbenzene	104	105	82-129	1	30				
m+p-Xylene	105	106	82-130	1	30				
o-Xylene	105	106	82-130	1	30				
Xylene (Total)	105	106	82-130	1	30				
1,3-Dichlorobenzene	105	107	79-123	2	30				
1,4-Dichlorobenzene	100	102	81-122	1	30				
1,2-Dichlorobenzene	98	100	82-117	2	30				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: PPL + Xylene (total) by 8260

Batch number: L073391AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzen
5225483	105	104	107	96
5225484	106	106	108	96
5225485	105	106	108	100
5225486	107	106	108	96
5225492	107	105	109	99
5225493	106	105	108	96
5225494	105	106	109	99
5225495	105	104	108	99
5225496	105	104	108	98
5225497	106	105	107	95
5225498	106	105	108	99
5225499	108	105	107	96
Blank	108	105	108	97
LCS	107	107	110	103
MS	105	104	110	103
MSD	105	107	110	103
Limits:	80-116	77-113	80-113	78-113

Analysis Name: PPL + Xylene (total) by 8260 Batch number: L073401AA

baccii ilumbei	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5225487	105	105	108	100
5225488	106	105	107	96

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 3

Quality Control Summary

Client Name: Chevron Group Number: 1067775

Reported: 12/17/07 at 12:55 PM

-		Surro	ogate Quality Contro	1
5225489	106	105	107	96
5225490	105	104	109	100
5225491	105	105	107	96
Blank	106	105	107	97
LCS	105	104	110	101
MS	105	107	110	101
MSD	105	104	110	101

Limits: 80-116 77-113 80-113 78-113

^{*-} Outside of specification

⁽¹⁾ The result for one or both determinations was less than five times the LOQ.

⁽²⁾ The unspiked result was more than four times the spike added.

Analysis Request/ Environmental Services Chain of Custody



- Laboratories	PI	ease print. In:	structions	s on reverse	side cor	respor	nd with	circled	numbei	s.				Ford ab Use Oak		
1) TRIHYORO Client: <u>CHEVRON - CINCINNATI</u>	Acct. #:	11494		Milit	(4)		<u>(</u> 5	**********	alvees ervatio	**************************************				For Lab Use Only FSC: SCR#:		<u> </u>
Project Name/#: 2th 260) SAM GRU					ľΫ́	H	~							Preservation Codes		
Project Manager: Doug LAm			0/0				۵							H=HCl T=Thiosu N=HNO₃ B=NaOH	1	(6)
Sampler: Dac LAm	Quote #:					8240	Cerco			İ				S=H ₂ SO ₄ O=Other		
Name of state where samples were collected			3	Y		ě	น เ	- 1			1			LOC 10FZ	-	
2)			13			70%	1 2		30					00		1
Sample Henthication	Cale Gellated	Collected				PP.	Sia							Remarks		
MW-37, 112707	11/27/07	1110	Х	X	4	X	Х	\bigvee					,		i	
MW-114, 112707	11/27/07	1400	X	×	4	×	X	1						SE ATTACHED AMPLITY		
MW-945, 112707	11/25/07	1530	X	$\perp \mid_{\mathbf{X}}$	4		X							ATTAC		
M4-480, 1/2807	11/23/67	1350	×	X	4	×	×							4 John John		
MW-485, 1128 07	11/28/07	1440	X	×		X	X			18				Ky, M2,		
MU-48I, 11280	11/20/07		X	×	4	Х	×			1					-	
ER1, 112907	11/29/07	. —	×	×	4	X	×	47								
MW-128, 112967	11/29/07	1150	X	X	4	X	×							NOTE: DISSOLU	ED L	EAD
Mu-1150, 112907			X	x	4	X	X					}		samples WE		
MW- 1155, 112907	11/29/07	1510		<u> </u>	4	X	X							FILTERED		
Turnaround Time Requested (TAT) (pleas (Rush TAT is subject to Lancaster Laboratories a			Re	Inquished	DE S	Þ			Date	Time	Rece	eivec	d by:		Date	Time (
Date results are needed: 0@_ 17-21;		·yc./	<u> </u>	\ 	U ()	<u> </u>	-		1/30/07							<u> </u>
Rush results requested by (please circle):	Phone Fax	E-mail	Re	linquished	by:				Date	Time	Rece	eived	d by:		Date	Time
Phone #: <u>5/3 - 3/53 - //323</u> Fax #:				- :							ļ	_	_			
E-mail address: diane tribydo .cv		 -		linquished	by:				Date	Time	Rece	eivec	d by:		Date	Time
Data Package Options (please circle if require	1	G Complete			`						<u> </u>	à			ļ	
	T RCP Ye	s No	Re	linquished	by:	\	_		Date	Time	Rece	eiveo	i by:	1	Date	Time
	C (MS/MSD/Zup)?	⊘ s No	D-	linguished	h.u.:			$\overline{}$	Det-	T:	/	/-	L		 	1
Type IV (CLP SOW) (ff yee, indicate ∞ sample an Type Vi (Raw Data Only) Internal COC F	d submit triplicate volume.) Required? Yes / 🐚		Ke	linquished	by:		÷		Date	Time	N /	/ K	1	1h	ر آ	Time
											1	bu	<u>UN</u>	ye.	12/15	1100

Analysis Request/ Environmental Services Chain of Custody



Acct. # 11494

For Lancaster Laboratories use only

Group# 1067775 Sample # 5225483-99

COC # 0165357

TRIHLDRO		1.40/1			Matrb	烈		(5			Regu on Cod				For Lab Use Only FSC: SCR#:	÷	_
Client: CHEVRON -CINCINNATI Project Name/#: 250 2001 SAM GRUND L	MATEL PWSID	#:			14.5	4)	#	N	Fies	ervati	OII CO	ues			Preservation Codes H=HCl T=Thiosu	fate	(6
Project Manager: DUG LAM Sampler: Dug Lam							8266	CEAD							N=HNO ₃ B=NaOH S=H ₂ SO ₄ O=Other		
Name of state where samples were collected:	GSHVO		(3				. √o′ %	WED			531				60c 20F2		
Sample Trivite Borrion	Ditte Collector	Time Zollected		E S			P	DISSOLVED		1					Remarks		
MW-810, 113007	11/30/07		×		×	4	_	X							· · · · · · · · · · · · · · · · · · ·		
MW-815, 11300	11/30/07		X		X.	9		X	}	\forall		-	<u> </u>		AMALYTE AMALYTE	V	
4W-101, 113007	11/30/07		۷	7	X	4		X		+	+	╂			see hive		· · · · · · · · · · · · · · · · · · ·
MU-7, 113007	11/30/07		X		X	4		X			1/3	\vdash			PANTAGA		•
BB2, 112807	11/28/07		X		×	4		X			1,4	-			1		
BD3, 113007	11/36/07		4		X		X	Y			+	\ _					
TRIP BLANK, 113007	11/30/07		X		X	2	×					$\downarrow \downarrow$					
	W.			14			<u> </u>				\perp	ļ`			NOTE: DISSOLU	ED L	EAD
300	N.	37					<u> </u>								SAMPLES WERE	fiel	۵
				┸╃		7	1								FILTERED.		
Furnaround Time Requested (TAT) (please Rush TAT is subject to Lancaster Laboratories app	•			Reind	uished		δ			Date		Re	ceive	d by:		Date	Time
Date results are needed: OEC 17-21, 2				Relina	uished l	by:	•			Date	1	Re	- Oilu Ge	d by:	· · · · · · · · · · · · · · · · · · ·	Date	Time
Rush results requested by (please circle): F Phone #: <u></u>	Phone Fax	E-mail		, LOUIL		.,.				Dato	''''	1 100		3 53.		Date	1 11116
E-mail address: d/amo thydro .com				Relino	uished I	bv:				Date	Time	Re	ceive	q pv.		Date	Time
Data Package Options (please circle if required		G Complete	?											,.			
ype I (validation/NJ Reg) TX TRRP-13 ype II (Tier II) MA MCP CT	RCP Ye	es No		Relino	uished l	by:				Date	Time	Red	Peive	d by:	<u> </u>	Date	Time
ype III (Reduced NJ) ype IV (CLP SOW) Site-specific QC (If yes, indicate QC sample and st		No No		Relina	uished l	by:				Date	Time	Red	eve	by:	1\	Date	Time
Type VI (Raw Data Only) Internal COC Re	quired? Yes / 🔯	1				-					1	+		lin	MI L	nlita	lus

11494 1067775 /5225483 -99

Constituents of Concern, Chevron Cincinnati Facility, Semi-Annual Interim Measures (IM) Groundwater Monitoring

Job # 500-017-010

Volatile Organic Constituents

- > Benzene
- Chlorobenzene
- ~ 1,2-Dichlorobenzene
- ~ 1,3-Dichlorobenzene
- ~ 1,4-Dichlorobenzene
- Ethylbenzene
- Toluene
- XylenesXylene -m
- Xylene -o
- ↓ Xylene -p

Metals

Dissolved Lead

Lancaster Laboratories Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

N.D.	none detected	BMQL	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	MPN	Most Probable Number
IU	International Units	CP Units	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	NTU	nephelometric turbidity units
С	degrees Celsius	F	degrees Fahrenheit
Cal	(diet) calories	lb.	pound(s)
meq	milliequivalents	kg	kilogram(s)
g	gram(s)	mg	milligram(s)
ug	microgram(s)	Ī	liter(s)
ml	milliliter(s)	ul	microliter(s)
m3	cubic meter(s)	fib >5 um/ml	fibers greater than 5 microns in length per ml

- < less than The number following the sign is the <u>limit of quantitation</u>, the smallest amount of analyte which can be reliably determined using this specific test.
- > greater than
- ppm parts per million One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

Inorganic Qualifiers

- ppb parts per billion
- **Dry weight**Besults printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture.

U.S. EPA data qualifiers:

Organic Qualifiers

Α TIC is a possible aldol-condensation product Value is <CRDL, but ≥IDL В Е Analyte was also detected in the blank Estimated due to interference С Pesticide result confirmed by GC/MS Duplicate injection precision not met M D Compound quatitated on a diluted sample Ν Spike amount not within control limits Ε Concentration exceeds the calibration range of S Method of standard additions (MSA) used the instrument for calculation J Estimated value U Compound was not detected Ν Presumptive evidence of a compound (TICs only) W Post digestion spike out of control limits Ρ Concentration difference between primary and Duplicate analysis not within control limits confirmation columns >25% Correlation coefficient for MSA < 0.995 U Compound was not detected X,Y,ZDefined in case narrative

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY – In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions of Lancaster Laboratories and we hereby object to any conflicting terms contained in any acceptance or order submitted by client.



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

ANALYTICAL RESULTS

Prepared for:

Chevron PO Box 96 North Bend OH 42052

Prepared by:

Lancaster Laboratories 2425 New Holland Pike Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 1068767. Samples arrived at the laboratory on Friday, December 07, 2007. The PO# for this group is 0015007286 and the release number is 50008931.

Client Description	Lancaster Labs Number
MW-85D,120407 Grab Water Sample	5231231
MW-85I,120407_Unspiked Grab Water Sample	5231232
MW-85I,120407_Matrix_Spike Grab Water Sample	5231233
MW-85I,120407_Matrix_Spike_Dup Grab Water Sample	5231234
MW-85I,120407_Duplicate Grab Water Sample	5231235
MW-85S,120407 Grab Water Sample	5231236
ER2,120407 Grab Water Sample	5231237
Trip_Blank,120607 Water Sample	5231238

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

1 COPY TO	Trihydro Corporation	Attn: Chris Aneiros
ELECTRONIC	Trihydro Corporation	Attn: Trihydro Database
COPY TO		
1 COPY TO	Data Package Group	
ELECTRONIC	Trihydro Corporation	Attn: Doug Lam
COPY TO		_



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Questions? Contact your Client Services Representative Gwen A Birchall at (717) 656-2300

Respectfully Submitted,

Max E. Snavely Senior Specialist





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5231231

MW-85D,120407 Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:12/04/2007 11:40 by DL Account Number: 11494

Submitted: 12/07/2007 10:15 Chevron Reported: 12/17/2007 at 17:38 PO Box 96

Discard: 02/16/2008 North Bend OH 42052

IM85D SDG#: HVO65-01

I 5E w

I SE	E W			As Received		
CAT	T		As Received	Method		Dilution
No.	. Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
070	055 Lead	7439-92-1	N.D.	0.0069	mg/l	1
063	371 8260 Special Cmpds for Wat	ers				
054	416 m+p-Xylene	n.a.	N.D.	0.8	ug/l	1
054	417 o-Xylene	95-47-6	N.D.	0.8	ug/l	1
081	171 1,3-Dichlorobenzene	541-73-1	N.D.	1.	ug/l	1
081	172 1,4-Dichlorobenzene	106-46-7	N.D.	1.	ug/l	1
081	173 1,2-Dichlorobenzene	95-50-1	N.D.	1.	ug/l	1
075	582 PPL + Xylene (total) by 82	60				
054	401 Benzene	71-43-2	N.D.	0.5	ug/l	1
054	407 Toluene	108-88-3	N.D.	0.7	ug/l	1
054	413 Chlorobenzene	108-90-7	N.D.	0.8	ug/l	1
054	415 Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
063	310 Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			Analysis			Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/13/2007 21:11	John P Hook	1
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	12/12/2007 08:25	Anita M Dale	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	12/12/2007 08:25	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/12/2007 08:25	Anita M Dale	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	12/12/2007 19:36	James L Mertz	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5231232

MW-85I,120407_Unspiked Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:12/04/2007 13:00 by DL Account Number: 11494

Submitted: 12/07/2007 10:15 Chevron Reported: 12/17/2007 at 17:38 PO Box 96

Discard: 02/16/2008 North Bend OH 42052

IM85I SDG#: HVO65-02BKG

I 5E w

I SE	E W			As Received		
CAT	T		As Received	Method		Dilution
No.	. Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
070	055 Lead	7439-92-1	N.D.	0.0069	mg/l	1
063	371 8260 Special Cmpds for Wat	ers				
054	416 m+p-Xylene	n.a.	N.D.	0.8	ug/l	1
054	417 o-Xylene	95-47-6	N.D.	0.8	ug/l	1
081	171 1,3-Dichlorobenzene	541-73-1	N.D.	1.	ug/l	1
081	172 1,4-Dichlorobenzene	106-46-7	N.D.	1.	ug/l	1
081	173 1,2-Dichlorobenzene	95-50-1	N.D.	1.	ug/l	1
075	582 PPL + Xylene (total) by 82	60				
054	401 Benzene	71-43-2	N.D.	0.5	ug/l	1
054	407 Toluene	108-88-3	N.D.	0.7	ug/l	1
054	413 Chlorobenzene	108-90-7	N.D.	0.8	ug/l	1
054	415 Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
063	310 Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			Analysis			Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/13/2007 20:17	John P Hook	1
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	12/12/2007 08:48	Anita M Dale	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	12/12/2007 08:48	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/12/2007 08:48	Anita M Dale	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	12/12/2007 19:36	James L Mertz	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5231233

MW-85I,120407_Matrix_Spike Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:12/04/2007 13:00 by DL Account Number: 11494

Submitted: 12/07/2007 10:15 Chevron Reported: 12/17/2007 at 17:38 PO Box 96

Discard: 02/16/2008 North Bend OH 42052

IM85I SDG#: HVO65-02MS

I 5E w

I PE W				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
07055	Lead	7439-92-1	0.122	0.0069	mg/l	1
06371	8260 Special Cmpds for Waters					
05416	m+p-Xylene	n.a.	44.	0.8	ug/l	1
05417	o-Xylene	95-47-6	22.	0.8	ug/l	1
08171	1,3-Dichlorobenzene	541-73-1	21.	1.	ug/l	1
08172	1,4-Dichlorobenzene	106-46-7	21.	1.	ug/l	1
08173	1,2-Dichlorobenzene	95-50-1	21.	1.	ug/l	1
07582	PPL + Xylene (total) by 8260					
05401	Benzene	71-43-2	22.	0.5	ug/l	1
05407	Toluene	108-88-3	22.	0.7	ug/l	1
05413	Chlorobenzene	108-90-7	22.	0.8	ug/l	1
05415	Ethylbenzene	100-41-4	22.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	66.	0.8	ug/l	1

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			Analysis			Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/13/2007 20:26	John P Hook	1
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	12/12/2007 09:10	Anita M Dale	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	12/12/2007 09:10	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/12/2007 09:10	Anita M Dale	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	12/12/2007 19:36	James L Mertz	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5231234

MW-85I,120407_Matrix_Spike_Dup Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:12/04/2007 13:00 by DL Account Number: 11494

Submitted: 12/07/2007 10:15 Chevron Reported: 12/17/2007 at 17:38 PO Box 96

Discard: 02/16/2008 North Bend OH 42052

IM85I SDG#: HVO65-02MSD

I 5E w

I 5E 1	W					
				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
0705	5 Lead	7439-92-1	0.122	0.0069	mg/1	1
0637	1 8260 Special Cmpds for Waters					
0541	C min Valana		44.	0.8	/ 3	1
0541	± 4	n.a.			ug/l	1
0541	7 o-Xylene	95-47-6	22.	0.8	ug/l	1
0817	1 1,3-Dichlorobenzene	541-73-1	21.	1.	ug/l	1
0817	2 1,4-Dichlorobenzene	106-46-7	21.	1.	ug/l	1
0817	3 1,2-Dichlorobenzene	95-50-1	21.	1.	ug/l	1
0758	2 PPL + Xylene (total) by 8260					
0540	1 Benzene	71-43-2	22.	0.5	ug/l	1
0540	7 Toluene	108-88-3	22.	0.7	ug/l	1
0541	3 Chlorobenzene	108-90-7	22.	0.8	ug/l	1
0541	5 Ethylbenzene	100-41-4	22.	0.8	ug/l	1
0631	0 Xylene (Total)	1330-20-7	67.	0.8	ug/l	1

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/13/2007 20:29	John P Hook	1
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	12/12/2007 09:32	Anita M Dale	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	12/12/2007 09:32	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/12/2007 09:32	Anita M Dale	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	12/12/2007 19:36	James L Mertz	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5231235

MW-85I,120407_Duplicate Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:12/04/2007 13:00 by DL Account Number: 11494

Submitted: 12/07/2007 10:15 Chevron Reported: 12/17/2007 at 17:38 PO Box 96

Discard: 02/16/2008 North Bend OH 42052

IM85I SDG#: HVO65-02DUP

I 5E w

As Received
T As Received Method

 CAT
 As Received
 Method
 Dilution

 No.
 Analysis Name
 CAS Number
 Result
 Detection
 Units
 Factor

 Limit
 0.0069
 mg/l
 1

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			-	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/13/2007 20:23	John P Hook	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	12/12/2007 19:36	James L Mertz	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 2

Lancaster Laboratories Sample No. WW 5231236

MW-85S,120407 Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:12/04/2007 15:35 by DL Account Number: 11494

Submitted: 12/07/2007 10:15 Chevron Reported: 12/17/2007 at 17:38 PO Box 96

Discard: 02/16/2008 North Bend OH 42052

IM85S SDG#: HVO65-03

rec)

I 5E w

					As Received		
CAT			As Rece	ived	Method		Dilution
No.	Analysis Name	CAS Number	Result		Detection Limit	Units	Factor
07055	Lead	7439-92-1	0.0095	J	0.0069	mg/l	1
06371	8260 Special Cmpds for Waters						
05416	m+p-Xylene	n.a.	280.		8.	ug/l	10
05417	o-Xylene	95-47-6	14.		0.8	ug/l	1
08171	1,3-Dichlorobenzene	541-73-1	N.D.		1.	ug/l	1
08172	1,4-Dichlorobenzene	106-46-7	N.D.		1.	ug/l	1
08173	1,2-Dichlorobenzene	95-50-1	N.D.		1.	ug/l	1
07582	PPL + Xylene (total) by 8260						
05401	Benzene	71-43-2	2.	J	0.5	ug/l	1
05407	Toluene	108-88-3	4.	J	0.7	ug/l	1
05413	Chlorobenzene	108-90-7	N.D.		0.8	ug/l	1
05415	Ethylbenzene	100-41-4	370.		8.	ug/l	10
06310	Xylene (Total)	1330-20-7	290.		8.	ug/l	10

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
07055	Lead	SW-846 6010B	1	12/13/2007 21:14	John P Hook	1
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	12/12/2007 09:55	Anita M Dale	10
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	12/12/2007 17:00	Anita M Dale	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	12/12/2007 09:55	Anita M Dale	10
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	12/12/2007 17:00	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/12/2007 17:00	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	12/12/2007 09:55	Anita M Dale	10
01848	WW SW846 ICP Digest (tot	SW-846 3005A	1	12/12/2007 19:36	James L Mertz	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 2 of 2

Lancaster Laboratories Sample No. WW 5231236

MW-85S,120407 Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:12/04/2007 15:35 by DL Account Number: 11494

Submitted: 12/07/2007 10:15 Chevron Reported: 12/17/2007 at 17:38 PO Box 96

Discard: 02/16/2008 North Bend OH 42052

IM85S SDG#: HVO65-03





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax; 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5231237

ER2,120407 Grab Water Sample Interim Measures (IM) Groundwater Monitoring

Collected:12/04/2007 09:00 by DL Account Number: 11494

Submitted: 12/07/2007 10:15 Chevron Reported: 12/17/2007 at 17:38 PO Box 96

Discard: 02/16/2008 North Bend OH 42052

IMERB SDG#: HVO65-04EB

I 5E w

I 5E W						
				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
07055	Lead	7439-92-1	N.D.	0.0069	mg/l	1
06371	8260 Special Cmpds for Waters					
05416	m+p-Xylene	n.a.	N.D.	0.8	ug/l	1
05417	o-Xylene	95-47-6	N.D.	0.8	ug/l	1
08171	1,3-Dichlorobenzene	541-73-1	N.D.	1.	ug/l	1
08172	1,4-Dichlorobenzene	106-46-7	N.D.	1.	ug/l	1
08173	1,2-Dichlorobenzene	95-50-1	N.D.	1.	ug/l	1
07582	PPL + Xylene (total) by 8260					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05413	Chlorobenzene	108-90-7	N.D.	0.8	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
0705	5 Lead	SW-846 6010B	1	12/13/2007 21:22	John P Hook	1
0637	'1 8260 Special Cmpds for Waters	SW-846 8260B	1	12/12/2007 10:17	Anita M Dale	1
0758	PPL + Xylene (total) by 8260	SW-846 8260B	1	12/12/2007 10:17	Anita M Dale	1
0116	GC/MS VOA Water Prep	SW-846 5030B	1	12/12/2007 10:17	Anita M Dale	1
0184	.8 WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	12/12/2007 19:36	James L Mertz	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5231238

Trip_Blank,120607 Water Sample
Interim Measures (IM) Groundwater Monitoring

Collected:12/06/2007 Account Number: 11494

Submitted: 12/07/2007 10:15 Chevron Reported: 12/17/2007 at 17:38 PO Box 96

Discard: 02/16/2008 North Bend OH 42052

IM-TB SDG#: HVO65-05TB

I 5E w

I SE W				As Received		
CAT No.	Analysis Name	CAS Number	As Received Result	Method Detection Limit	Units	Dilution Factor
06371	8260 Special Cmpds for Waters					
05416	m+p-Xylene	n.a.	N.D.	0.8	ug/l	1
05417	o-Xylene	95-47-6	N.D.	0.8	ug/l	1
08171	1,3-Dichlorobenzene	541-73-1	N.D.	1.	ug/l	1
08172	1,4-Dichlorobenzene	106-46-7	N.D.	1.	ug/l	1
08173	1,2-Dichlorobenzene	95-50-1	N.D.	1.	ug/l	1
07582	PPL + Xylene (total) by 8260					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05413	Chlorobenzene	108-90-7	N.D.	0.8	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT				Dilution		
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
06371	8260 Special Cmpds for Waters	SW-846 8260B	1	12/12/2007 10:39	Anita M Dale	1
07582	PPL + Xylene (total) by 8260	SW-846 8260B	1	12/12/2007 10:39	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/12/2007 10:39	Anita M Dale	1



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 2

Quality Control Summary

Client Name: Chevron Group Number: 1068767

Reported: 12/17/07 at 05:38 PM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method

Laboratory Compliance Quality Control

Analysis Name	Blank <u>Result</u>	Blank <u>MDL</u>	Report <u>Units</u>	LCS %REC	LCSD %REC	LCS/LCSD <u>Limits</u>	RPD	RPD Max
Batch number: 073461848003	_		5231231-52					
Lead	N.D.	0.0069	mg/l	100		90-113		
Batch number: L073461AA	Sample nu	mber(s):	5231231-52	31234,5231	1236-52312	38		
Benzene	N.D.	0.5	ug/l	99		78-119		
Toluene	N.D.	0.7	ug/l	100		85-115		
Chlorobenzene	N.D.	0.8	ug/l	102		85-115		
Ethylbenzene	N.D.	0.8	ug/l	100		82-119		
m+p-Xylene	N.D.	0.8	ug/l	102		83-113		
o-Xylene	N.D.	0.8	ug/l	103		83-113		
Xylene (Total)	N.D.	0.8	ug/l	102		83-113		
1,3-Dichlorobenzene	N.D.	1.	ug/l	101		81-114		
1,4-Dichlorobenzene	N.D.	1.	ug/l	100		84-116		
1,2-Dichlorobenzene	N.D.	1.	ug/l	100		81-112		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS <u>%REC</u>	MSD %REC	MS/MSD <u>Limits</u>	RPD	RPD <u>MAX</u>	BKG <u>Conc</u>	DUP Conc	DUP <u>RPD</u>	Dup RPD Max
Batch number: 073461848003	Sample	number(s)	: 5231231	-52312	37 UNSE	PK: 5231232	BKG: 523123	32	
Lead	101	102	75-125	0	20	N.D.	N.D.	0 (1)	20
Batch number: L073461AA	Sample	number(s)	: 5231231	-52312	34,5231	236-5231238	UNSPK: 523	31232	
Benzene	109	109	83-128	0	30				
Toluene	109	109	83-127	0	30				
Chlorobenzene	108	109	83-120	1	30				
Ethylbenzene	109	109	82-129	0	30				
m+p-Xylene	110	110	82-130	0	30				
o-Xylene	111	112	82-130	1	30				
Xylene (Total)	110	111	82-130	1	30				
1,3-Dichlorobenzene	107	106	79-123	1	30				
1,4-Dichlorobenzene	106	105	81-122	0	30				
1,2-Dichlorobenzene	106	107	82-117	1	30				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

- *- Outside of specification
- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

PA ARCHIVE DOCUMENT

MS



Analysis Report

103

103

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 2 of 2

Quality Control Summary

Client Name: Chevron Group Number: 1068767

106

108

Reported: 12/17/07 at 05:38 PM

108

Surrogate Quality Control

107

108

Analysis Name: PPL + Xylene (total) by 8260 Batch number: L073461AA

Dibromofluoromethane		1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5231231	110	107	104	98
5231232	109	107	104	97
5231233	108	106	107	103
5231234	109	108	108	103
5231236	108	108	110	104
5231237	109	106	104	98
5231238	110	108	104	98
Blank	110	107	104	98
LCS	108	105	108	104

Limits: 80-116 77-113 80-113 78-113

^{*-} Outside of specification

⁽¹⁾ The result for one or both determinations was less than five times the LOQ.

⁽²⁾ The unspiked result was more than four times the spike added.

Analysis Request/ Environmental Services Chain of Custody



For Lancaster Laboratories use only

Group# 1068767 Sample # 5231231-38 COC # 0165358

Laboratories	F	Please print. Ins	structio	ns on r	everse :	side cor	respor	nd with	circle	d numb	oers.	000	oler	ter	MO 2 L C	,000	
1) TRIHYDRO Client: CHEVRON - CINCINNATI					Matrix	142		(5		alyst		quesi codes	66		FSC: SCR#:	-	-
Project Name/#: 250 ZOOT SAIM GRUNC				-	Paris		Н	لم						/	Preservation Codes H=HCl T=Thiosu	Ifate	
Project Manager: Dub Lam	P.O.#: <u>:</u>	500-017-01	/0					CENO					$/\!\!/$	ŀ	N=HNO ₃ B=NaOH		(6)
Sampler: Daus LAm	Quote #	t:		-	뛖윉			3				\mathscr{N}			S=H ₂ SO ₄ O=Other		
Name of state where samples were collected:	OHO		(3)				8266	Ŗ			30						
2 Sample identification	Page Collected	Time Callected			Nater		YOC 8	DISSOLVED		1	•				Remarks		
MU-850, 120407	12/4/07	1146	Х	instite teetste	Х	4	x	X					-		Remarks		
MW-851 ,120407	12/4/07	1300	X		×	4	X	X							ATTACHE	P	···
MW-85I MS/MSD, 120407	12/4/07		X		X	8	X	Y		A		7			SEE ATTACHE ANALYTE L	151	
MW-855, 120407	12/4/0		X		X	4	×	X			7.				ANALYTE	 -	
ERZ, 120467	12/4/07		X		X	4	×	X			1						
TRIP BLANK, 120607	12/6/07	-	X		X	Z						X					
	N		7	\Box			*										
1014	1/2	sj/			23						1				NOTE: DISSOLVED	(EAC)
		7									-		1	t	SAMPLES VERE		
						$\overline{}$				\top				1	FILTERED	7,000	<u> </u>
Turnaround Time Requested (TAT) (please		~	R	e∦n⊈ui	shed j	v: 🗸				Date	Tir	me R	eceive	d by:		Date	Time (
(Rush TAT is subject to Lancaster Laboratories applicate results are needed: <u>DEC 30, 200)</u>	oval and surcha	rge.)		<u> </u>	<u>- X</u>					12/6/0	n 20	50					
Rush results requested by (please circle): P	hone Fax	E-mail	R	di nqui	shed b	y:				Date	Tir	me R	eceiv e	d by:	The state of the s	Date	Time
Phone #: <u>573 - 353 - 1323</u> Fax #:			L														
E-mail address: diem @ trihydro.com				elinqui	shed	X .				Date	: Tir	me R	eceive	d by:		Date	Time
Data Package Options (please circle if required) Type I (validation/NJ Reg) TX TRRP-13		G Complete?	_				\searrow			_							
Type II (Tier II) MA MCP CT			R	elinqui	shed b	y:				Date	Tir	me R	eceive	d by:		Date	Time
Type IV (CLP SOW) Site-specific QC (If yes, indicate OC sample and sub		Ve≥ No	<u> </u>						\rightarrow	_	+_				·	ļ	1
Type IV (CLP SOW) Type VI (Raw Data Only) Internal COC Rec		<u>, </u>	K	elinqui	shed b	y:				Date	\Tir	me R	eceive	d by: المدا	A 1 A 1	11	Time
												$\searrow \chi$		MY	W/VIACI 10	17/07	1019

Constituents of Concern, Chevron Cincinnati Facility, Interim Measures (IM) Groundwater Monitoring

Volatile Organic Constituents

Benzene¹

Chlorobenzene

1,2-Dichlorobenzene

1,3-Dichlorobenzene

1,4-Dichlorobenzene

Ethylbenzene

Toluene

Xylenes

Xylene -m

Xylene -o

Xylene -p

<u>Metals</u>

Dissolved Lead

Lancaster Laboratories Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

N.D.	none detected	BMQL	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	MPN	Most Probable Number
IU	International Units	CP Units	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	NTU	nephelometric turbidity units
С	degrees Celsius	F	degrees Fahrenheit
Cal	(diet) calories	lb.	pound(s)
meq	milliequivalents	kg	kilogram(s)
g	gram(s)	mg	milligram(s)
ug	microgram(s)	Ī	liter(s)
ml	milliliter(s)	ul	microliter(s)
m3	cubic meter(s)	fib >5 um/ml	fibers greater than 5 microns in length per ml

- < less than The number following the sign is the <u>limit of quantitation</u>, the smallest amount of analyte which can be reliably determined using this specific test.
- > greater than
- ppm parts per million One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

Inorganic Qualifiers

- ppb parts per billion
- **Dry weight**Besults printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture.

U.S. EPA data qualifiers:

Organic Qualifiers

Α TIC is a possible aldol-condensation product Value is <CRDL, but ≥IDL В Е Analyte was also detected in the blank Estimated due to interference С Pesticide result confirmed by GC/MS Duplicate injection precision not met M D Compound quatitated on a diluted sample Ν Spike amount not within control limits Ε Concentration exceeds the calibration range of S Method of standard additions (MSA) used the instrument for calculation J Estimated value U Compound was not detected Ν Presumptive evidence of a compound (TICs only) W Post digestion spike out of control limits Ρ Concentration difference between primary and Duplicate analysis not within control limits confirmation columns >25% Correlation coefficient for MSA < 0.995 U Compound was not detected X,Y,ZDefined in case narrative

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY – In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions of Lancaster Laboratories and we hereby object to any conflicting terms contained in any acceptance or order submitted by client.

APPENDIX C

DATA VALIDATION REPORTS

NOVEMBER TO DECEMBER 2007 (SECOND SEMIANNUAL) MONITORING EVENT





Client: Chevron-Cincinnati	Laboratory: Lancaster Laboratories			
Project Name: Interim Measures Groundwater Monitoring	Sample Matrix: Water			
Project Number: 500-017-010	Sample Start Date: 11/9/2007			
Date Validated: 2/11/2008	Sample End Date: 11/16/2007			
Parameters: VOCs (8260B), Lead (EPA 6010B)				
Laboratory Project ID: SDG: HVO63, Sample Group: 1066181				
Data Validator: Andy Smith, Environmental Chemist				

DATA EVALUATION CRITERIA SUMMARY

A Tier III data validation was performed by Trihydro Corporation's Data Validation Group on the analytical data report package generated by Lancaster Laboratories evaluating samples from Cincinnati Soils Remedy, Hooven, Ohio. Precision, accuracy, method compliance, and completeness of this data package were assessed during this data review. Precision was determined by evaluating the calculated RPD values of samples from field duplicates pairs and laboratory duplicates pairs. Laboratory accuracy was established by reviewing the demonstrated percent recovery of matrix spike (MS), matrix spike duplicates (MSD), and laboratory control samples (LCS) to verify that none of the data were biased. Method compliance was established by reviewing holding times, detection limits, surrogate recoveries, method blanks, and laboratory control samples against method specific requirements. Completeness was evaluated by determining the overall ratio of the number of samples planned versus the number of samples with valid analyses. Determination of completeness included a review of the chain-of-custody, laboratory analytical methods, and all other necessary documents associated with this analytical data set.

SAMPLE NUMBERS TABLE

Client Sample ID	Sample Number	Laboratory Sample Code
L-4R, 111007 Grab Water Sample	5216314	IML4R
MW-33, 110907 Grab Water Sample	5216315	IMM33
MW-23, 110907 Grab Water Sample	5216316	IMM23
MW-104, 111007, Grab Water Sample	5216317	IM104
MW-95D, 111407, Grab Water Sample	5216318	IM95D
MW-65D, 111207 Grab Water Sample	5216319	IM65D
BD1, 111207 Grab Water Sample	5216320	IMBD1
MW-65S, 111207 Grab Water Sample	5216321	IM65S
MW-65I, 111207 Grab Water Sample	5216322	IM65I
MW-95S, 111407 Grab Water Sample	5216323	IM95S
MW-120, 111507 Grab Water Sample	5216324	IM120
MW-26R, 111407 Grab Water Sample	5216325	IM26R
MW-100S, 111607 Grab Water Sample	5216326	IM100
TB, 111607 Water Sample	5216327	IMTB-





The samples were analyzed for client-specified analytes. The samples were shipped to Lancaster Laboratories, Lancaster, PA, under chain-of-custody documents 0165359 and 0165360. The laboratory data were reviewed to evaluate compliance with the required methods and the quality of the reported data. A leading check mark (✓) indicates that the referenced data were deemed acceptable. A preceding crossed circle (⊗) signifies problems with the referenced data that may have warranted attaching qualifiers to the data.

- ✓ Data Completeness
- ✓ Holding Times and Preservation
- ✓ Calibrations
- ✓ Blanks
- ✓ System Monitoring Compounds
- ✓ Laboratory Control Samples (LCS/LCSD)
- ✓ Matrix Spike/Matrix Spike Duplicate (MS/MSD)
- ✓ Field Duplicates

OVERALL DATA PACKAGE ASSESSMENT

Based on a data validation review, the data are acceptable as delivered. No data was qualified by the laboratory. The purpose of validating data and assigning qualifiers is to assist in proper data interpretation. Data which are not qualified meet the site data quality objectives. If values are assigned a "J" or "UJ" qualifier, the data may be used for site evaluation, with the reasons for qualification being given consideration when interpreting sample concentrations. Data points which are assigned an "R" qualifier should not be used for any site evaluation purposes. No data points were qualified as a result of this data validation review. All method detection limits (MDLs) were found to be acceptable and within client specified criteria.

Data Completeness

All analyses were performed as requested on the chain-of-custody records. All samples were received by the laboratory and analyzed properly. The complete data package consisted of 143 data points, total. No data points were rejected. The data completeness measure for this data package is 100%.



Table 1. General Validation Criteria Checklist						
Did the laboratory identify any non-conformances related to the analytical data?	Yes					
Comments: The vial submitted for sample 5216323 did not have a pH $<$ 2 at the time of analysis. Due to the volatile nature of the analytes, it is not appropriate for the laboratory to adjust the pH at the time of sample receipt. The pH of this sample was pH = 4.						
2. Were sample chain-of-custody forms complete?	Yes					
Comments: The chain-of-custody forms appeared to be complete from the field to the laboratory	•					
3. Were detection limits in accordance with the QAPP, permit, or method?	Yes					
Comments: Requirements for detection limits were not supplied by the project manager, but app no dilutions were required for analysis.	eared acceptable since					
4. Were the requested analytical methods in compliance with the QAPP, permit, or COC?	Yes					
Comments: All constituents requested on the chain-of-custody form were reported.						
5. Were samples received in good condition?	No					
Comments: Samples were received in good condition at a temperature of 3.8° Celsius with the exception of sample, MW-95S, 111407 Grab Water Sample, which was reported with a pH of 4 at the time of analysis. As a result, the technical holding time of seven days will be used to evaluate the VOC data.						
6. Were sample holding times met?	Yes					
Comments: Samples were analyzed within method required holding times and technical holding times.						
7. Were correct concentration units reported?	Yes					
Comments: Metals were reported in concentration units of mg/L and VOCs were reported in μ g/L for the analysis of water samples.	_, which is appropriate					
8. Do the laboratory reports include all constituents requested to be reported for a specific analytical method?	Yes					
Comments: All constituents and analyses requested on the chain-of-custody form were reported	by the laboratory.					
9. Were the reporting requirements for flagged data met?	N/A					
Comments: No data were qualified by the laboratory for this data set by the laboratory.						
10. Were field duplicates collected on a 10% basis? Comments: One blind duplicate (BD1, 111407 Grab Water Sample), for 12 samples, was collected MW-26R, 111407 Grab Water Sample. However, this is part of an ongoing sampling event and does not affect the quality of the data.	No ted as a duplicate of the lack of duplicates					
11. Were field duplicate RPD values less than 30%?	Yes					
Comments: All results for both samples were non-detect.	Ma					
12. Were equipment blanks, trip blanks, and field blanks collected on a 10% basis? Comments: One trip blank and no equipment blanks or field blanks were collected during this sa this is part of an ongoing sampling event and the lack of blanks does not affect the quality of the						
13. Were detections found in trip blanks, equipment blanks, or field blanks? Comments: No detections were reported in the trip blank associated with this data sets.	No No					



Table 2. Validation Criteria Checklist for VOC analyses (8260B)							
1. Were the initial and continuous calibration verifications within acceptable limits?	Yes						
Comments: Initial and continuous calibration data appeared to be within quality control lin	Comments: Initial and continuous calibration data appeared to be within quality control limits for all reported analytes.						
2. Was the instrument tuning results within method control limits?	Yes						
Comments: Instrument performance checks were performed in accordance with the EPA abundance criteria appeared to be within the control limits.	guidance and all ion						
3. Were the internal standards within method control limits?	Yes						
Comments: The volatile internal standard area and retention time summary results were	acceptable.						
4. Were method blank samples analyzed on a 5% basis?	Yes						
Comments: Method blank samples were prepared and analyzed on a greater than 5% free	Comments: Method blank samples were prepared and analyzed on a greater than 5% frequency.						
5. Were method blank detections reported for this data set?	No						
Comments: There were no detections of reportable VOC analytes in the method blanks associated with this sample set.							
6. Were laboratory control samples analyzed on a 5% basis? Comments: Laboratory control samples were prepared and analyzed on a greater than 5% frequency.							
7. Were laboratory control recoveries within acceptable limits? Comments: For batch L073242AA, all LCS recovery result for target analytes were within acceptable quality control limits.							
8. Were matrix spike samples prepared on a 5% basis?	Yes						
Comments: The laboratory prepared and analyzed one matrix spike sample from client samples MW-33, 110907 Grab Water Sample.							
9. Were matrix spike recoveries within acceptable limits?	Yes						
Comments: For batch L073242AA, all matrix spike sample recovery results for target and quality control limits. The RPD values were all below the maximum acceptable limit of 30°							
10. Were surrogate recoveries within control limits?	Yes						
Comments: The surrogate recoveries for all samples were within acceptable limits of dibr 116%R), 1,2-dichloroethane-d4 (77-116%R), toluene-d8 (80-113%R), and 4-bromofluorot							
11. General Comments: The Method 8260B results are accepted as reported by the laboratory.							



Table 3. Validation Criteria Checklist for Metal Analyses (6010B) Were the initial and continuous calibration standards within acceptable limits? Yes Comments: One initial calibration and four continuing calibration verifications were reported with this data set. All recoveries were within the acceptable limits. Were the instrument tunings within method control limits? Comments: The percent recovery values for the low level ICP checks were within acceptable limits (103.3-104.0%). The percent recoveries for the initial and final interference checks were within acceptable control limits (92.4-94.6%). Serial dilutions were in accordance with the EPA guidance. Were the internal standards within method control limits? N/A Comments: Internal standards were not used in the analysis of metals. Were preparation blank samples analyzed on a 5% basis? Yes Comments: Preparation blank samples were prepared and analyzed on a greater than 5% basis. Were preparation blank detections reported for this data set? No Comments: No detections were reported for the preparation blanks associated with this data set. Were laboratory control samples analyzed on a 5% basis? Yes Comments: The laboratory analyzed LCSs on a greater than 5% frequency. Yes Were laboratory control recoveries within acceptable limits? Comments: Laboratory control sample results were within the quality control limits. Were matrix spike samples prepared on a 5% basis? Yes Comments: One MS/MSD sample pair was analyzed by the laboratory to document precision and accuracy in this analytical group. The MS/MSD pair was not prepared from samples associated with this data set. Were matrix spike recoveries within acceptable limits? Yes Comments: All matrix spike recoveries for metal analysis and reported RPD values were within the acceptable control limits. General Comments: The metals data are accepted as issued by the laboratory.





Client: Chevron-Cincinnati	Laboratory: Lancaster Laboratories				
Project Name: Interim Measures Groundwater Monitoring	Sample Matrix: Water				
Project Number: 500-017-010	Sample Start Date: See Laboratory Project ID				
Date Validated: 1/16/2008	Sample End Date: See Laboratory Project ID				
Parameters: VOCs (8260B0, ICP Digest (3005A), Lead (6010B)					
Laboratory Project ID: HVO-64					
1067172 (samples collected 11/19/2007 to 11/20/2007)					
1067775 (samples collected 11/27/2007 to 11/30/2007)					
Data Validator: Andy Smith, Environmental Chemist					

DATA EVALUATION CRITERIA SUMMARY

A Tier III data validation was performed by Trihydro Corporation's Data Validation Group on the analytical data report package generated by Lancaster Laboratories evaluating samples from Chevron Cincinnati Facility, Hooven, OH. Precision, accuracy, method compliance, and completeness of this data package were assessed during this data review. Precision was determined by evaluating the calculated RPD values of samples from field duplicates pairs and laboratory duplicates pairs. Laboratory accuracy was established by reviewing the demonstrated percent recovery of matrix spike (MS), matrix spike duplicates (MSD), and laboratory control samples (LCS) to verify that none of the data were biased. Method compliance was established by reviewing holding times, detection limits, surrogate recoveries, method blanks, and laboratory control samples against method specific requirements. Completeness was evaluated by determining the overall ratio of the number of samples planned versus the number of samples with valid analyses. Determination of completeness included a review of the chain-of-custody, laboratory analytical methods, and all other necessary documents associated with this analytical data set.

SAMPLE NUMBERS TABLE

Client Sample ID	Sample Number	Laboratory Sample Code				
Data Set 1067172						
MW-134, 111907 Grab Water Sample	5221159	IM134				
MW-132, 111907 Grab Water Sample	5221160	IM132				
MW-133, 112007 Grab Water Sample	5221161	IM133				
MW-131, 112007 Grab Water Sample	5221162	IM131				
MW-35, 112007_Unspiked Grab Water Sample	5221163	IM-35				
MW-35, 112007MS_Matrix_Spike Grab Water Sample	5221164	IM-35				
MW-35, 112007MSD_Matrix_Spike_Dup Grab Water Sample	5221165	IM-35				
MW-35, 112007_Duplicate Grab Water Sample	5221166	IM-35				
TRIP_BLANK, 112707 Water Sample	5221167	IMTRB				
Data Set 1067	775					
MW-37, 112707 Grab Water Sample	5225483	MW37-				
MW-114, 112707 Grab Water Sample	5225484	MW114				
MW-94S, 112707 Grab Water Sample	5225485	MW94S				
MW-48D, 112807 Grab Water Sample	5225486	MW48D				
MW-48S, 112807 Grab Water Sample	5225487	MW48S				
MW-48I, 112807 Grab Water Sample	5225488	MW48I				
ER1, 112907 Grab Water Sample	5225489	ER1				
MW-128, 112907 Grab Water Sample	5225490	MW128				
MW-115D, 112907 Grab Water Sample	5225491	M115D				
MW-115S, 112907 Grab Water Sample	5225492	M115S				





Client Sample ID	Sample Number	Laboratory Sample Code
MW-81D, 113007 Grab Water Sample	5225493	MW81D
MW-81S, 113007 Grab Water Sample	5225494	MW81S
MW-101, 113007 Grab Water Sample	5225495	MW101
MW-7, 113007 Grab Water Sample	5225496	MW-7-
BD2, 112807 Grab Water Sample	5225497	-BD2-
BD3, 113007 Grab Water Sample	5225498	-BD3-
TripBlank, 113007 Water Sample	5225499	IMGTB





The samples were analyzed for client-specified analytes. The samples were shipped to Lancaster Laboratories under chain-of-custody documents 0165355, 0165356, and 0165357. The laboratory data were reviewed to evaluate compliance with the required methods and the quality of the reported data. A leading check mark (✓) indicates that the referenced data were deemed acceptable. A preceding crossed circle (⊗) signifies problems with the referenced data that may have warranted attaching qualifiers to the data.

- ✓ Data Completeness
- ✓ Holding Times and Preservation
- ✓ Calibrations
- ✓ Blanks
- ✓ System Monitoring Compounds
- ✓ Laboratory Control Samples (LCS/LCSD)
- ✓ Matrix Spike/Matrix Spike Duplicate (MS/MSD)
- ⊗ Field Duplicates

OVERALL DATA PACKAGE ASSESSMENT

Based on a data validation review, the data are acceptable as delivered with the changes noted below. Lancaster Laboratories qualified a total of 21 data points with "J" data flags in this data set. The laboratory assigned data qualifiers were reviewed and found to be valid and correct. The purpose of validating data and assigning qualifiers is to assist in proper data interpretation. Data which are not qualified meet the site data quality objectives. If values are assigned a "J" or "UJ" qualifier, the data may be used for site evaluation, with the reasons for qualification being given consideration when interpreting sample concentrations. Data points which are assigned an "R" qualifier should not be used for any site evaluation purposes. A total of 12 additional data points were qualified with "J" or "UJ" data flags as a result of this data validation review. All method detection limits (MDLs) were found to be acceptable and within client specified criteria. Some of the qualified data points are useful only for qualitative purposes with the professional judgment of the project manager and associated technical staff.

Data Completeness

All analyses were performed as requested on the chain-of-custody records. All samples were received by the laboratory and analyzed properly. The complete data package consisted of 231 data points, total. No data points were rejected. The data completeness measure for this data package is 100%.



Table 1. General Validation Criteria Checklist	
Did the laboratory identify any non-conformances related to the analytical data?	No
Comments: The laboratory did not note any non-conformances.	
2. Were sample chain-of-custody forms complete?	Yes
Comments: The chain-of-custody forms were completely filled out and correctly relinquished.	
3. Were detection limits in accordance with the QAPP, permit, or method?	Yes
Comments: All detection limits appeared to be acceptable. No dilutions were required.	
4. Were the requested analytical methods in compliance with the QAPP, permit, or COC?	Yes
Comments: The laboratory analyzed all samples as requested by the client on the chain-of-cu	ustody documents.
5. Were samples received in good condition?	Yes
Comments: The samples were received by the laboratory in good condition, within a tempera 2.6 °C. No data were qualified as a result of the low temperature because no bottles were broken.	
6. Were sample holding times met?	Yes
Comments: All sample holding times were met by the laboratory.	
7. Were the results reported in correct concentration units?	Yes
Comments: All results for lead were reported in mg/L and result for VOCs were reported in µg the respective water matrix.	g/L, which is acceptable for
8. Do the laboratory reports include all constituents requested to be reported for a specific analytical method?	Yes
Comments: The laboratory reported all required analytical constituents.	
9. Were the reporting requirements for flagged data met?	Yes
Comments: Several data points were flagged by the laboratory as "J" indicating that the resul to the Method Detection Limit (MDL) and less than the Limit of Quantitation (LOQ).	,
 Were field duplicates collected on a 10% basis? Comments: For data set 1067775, blind duplicate (BD2) was collected as a duplicate of MW-(BD3) was collected as duplicate of MW-7. 	Yes 48D and blind duplicate
11. Were field duplicate RPD values less than 50%? Comments: For the blind duplicate pair, BD3/MW-7, the following analytes had calculated RP 30%: m+p xylene (40.0%), o-xylene (66.7%), benzene (54.5%), toluene (66.7%), ethylbenzen xylenes (50.0%). As a result of high RPD values the analytes for the blind duplicate pair will be repeatability.	e (66.7%), and total
12. Were equipment blanks and field blanks collected on a 10% basis? Comments: One equipment blank (ER-1, 112907) and two trip blanks were submitted as par	Yes t of the sampling event.
13. Were detections found in trip blanks, equipment blanks, or field blanks? Comments: There were no detections reported in the respective blanks.	No



Table 2. Validation Criteria Checklist for VOC analyses (8260B)

Were the initial and continuous calibration verifications within acceptable limits?

No

Comments: There were two initial calibrations and four continuous calibrations reported with this data package. In four of the six total calibrations, 1,2-dichloroethane was reported with an RRF result less than 0.05. No qualification is necessary since this was not a reported analyte. Calibrations for this analysis were performed using a heated purge. The EPA Guidelines for Organic Data Review states that all initial calibrations for water and low-level soil samples should be performed with an unheated purge. No data will be qualified based solely on these criteria.

2. Was the instrument tuning results within method control limits?

Yes

Comments: Instrument performance checks were performed in accordance with the EPA guidance and all ion abundance criteria appeared to be within the control limits.

3. Were the internal standards within method control limits?

Yes

Comments: The volatile internal standard area and retention time summary results were acceptable.

4. Were method blank samples analyzed on a 5% basis?

Yes

Comments: Method blank samples were prepared and analyzed on a greater than 5% frequency.

5. Were method blank detections reported for this data set?

No

Comments: There were no detections of reportable VOC analytes in the method blanks associated with this sample set.

6. Were laboratory control samples analyzed on a 5% basis?

Yes

Comments: One LCS was analyzed with each batch. No laboratory control sample duplicates (LCSD) were reported with this data set.

7. Were laboratory control recoveries within acceptable limits?

Yes

Comments: Laboratory control sample recoveries for target analytes were within quality control limits.

8. Were matrix spike samples prepared on a 5% basis?

Yes

Comments: The laboratory prepared and analyzed four matrix spike and matrix spike duplicate samples. Batch W073342AA, L073401AA, and L073391AA were prepared from samples not associated with this data set. Batch W073361AA was prepared from sample MW-35.

9. Were matrix spike recoveries within acceptable limits?

Yes

Comments: In batch L073401AA, chlorobenzene (173% and 176%; acceptable range 83-120% were recovered outside of acceptable limits. No data were qualified since the MS/MSD pair was not prepared from a sample associated with this client's data.

10. Were surrogate recoveries within control limits?

Yes

Comments: The surrogate recoveries for all samples were within acceptable limit for dibromofluoromethane (80-116%R), 1,2-dichloroethane-d4 (77-113%R), toluene-d8 (80-113%R), and 4-bromofluorobenzene (78-113%R).

11. General Comments: The Method 8260B results are accepted as reported by the laboratory.



Table 3. Validation Criteria Checklist for Metal Analyses (6010B) Were the initial and continuous calibration standards within acceptable limits? Yes Comments: Two initial calibrations and eight continuing calibration verifications were reported with this data set. All recoveries were within the acceptable limits. Were the instrument tunings within method control limits? No Comments: The percent recovery values for the low level ICP checks were within acceptable limits (92.7 – 107.3%). The percent recoveries for the initial and final interference checks were within acceptable control limits (81.0-84.6%). Serial dilutions were in accordance with the EPA guidance. Were the internal standards within method control limits? No Comments: Internal standards were not used in the analysis of metals. Were preparation blank samples analyzed on a 5% basis? Yes Comments: Preparation blank samples were prepared and analyzed on a greater than 5% basis. Were preparation blank detections reported for this data set? No Comments: No detections were reported for the preparation blanks associated with this data set. Were laboratory control samples analyzed on a 5% basis? Yes Comments: The laboratory analyzed LCSs on a greater than 5% frequency. Yes Were laboratory control recoveries within acceptable limits? Comments: There were a total of two LCSs were analyzed by the laboratory to document precision and accuracy in this analytical group. The recoveries of all reportable metals in the LCS samples were acceptable. Yes Were matrix spike samples prepared on a 5% basis? Comments: Two MS/MSD pairs were prepared for lead in these data sets. Batch 073371848003 was prepared from sample MW-35. Batch 073381848006 was prepared from sample MW-37. Yes Were matrix spike recoveries within acceptable limits? Comments: All matrix spike recoveries for metal analysis and reported RPD values were within the acceptable control General Comments: The metals data are accepted as issued by the laboratory, with the additional qualifications noted in item #2, above.



Table 4. Data Qualification, Former Texaco Cincinnati Refinery, Hooven, OH (1067172 and 1067775)

Lab Sample ID	Field Sample ID	Analyte	Result (ug/L)	Qualifier	Reviewer Qualifier Reason
5225496	MW-7	m+p-xylene	8	J	High RPD, poor repeatability
5225496	MW-7	o-xylene	1	J	High RPD, poor repeatability
5225496	MW-7	Benzene	16	J	High RPD, poor repeatability
5225496	MW-7	Toluene	1	J	High RPD, poor repeatability
5225496	MW-7	Ethylbenzene	1	J	High RPD, poor repeatability
5225496	MW-7	Xylene (total)	9	J	High RPD, poor repeatability
5225498	BD-3	m+p-xylene	12	J	High RPD, poor repeatability
5225498	BD-3	o-xylene	2	J	High RPD, poor repeatability
5225498	BD-3	Benzene	28	J	High RPD, poor repeatability
5225498	BD-3	Toluene	2	J	High RPD, poor repeatability
5225498	BD-3	Ethylbenzene	2	J	High RPD, poor repeatability
5225498	BD-3	Xylene (total)	15	J	High RPD, poor repeatability

UJ - Value estimated below the reporting limit



Table 5. Blind Duplicate Summary, Former Texaco Cincinnati Refinery, Hooven, OH (1067775)

	Parent MW-7; Duplicate: BD-3					
Analyte	Laboratory Result	Duplicate Result	Relative Percent Difference (RPD)			
m+p-xylene	8 μg/L	12 μg/L	40.0%			
o-xylene	1 μg/L	2 μg/L	66.7%			
Benzene	16 μg/L	28 μg/L	54.5%			
Toluene	1 μg/L	2 μg/L	66.7%			
Ethylbenzene	1 μg/L	2 μg/L	66.7%			
Xylene (total)	9 μg/L	15 μg/L	50.0%			

Field duplicate RPD control limits should not exceed 30% for aqueous samples, and 50% for solid samples as established by USEPA Region 1 Laboratory Data Validation Function Guidelines for Evaluation of Organic Analysis, February 1988. The bolded RPD values may indicate poor repeatability and all associated data will be qualified as a result.





Client: Chevron-Cincinnati	Laboratory: Lancaster Laboratories	
Project Name: Interim Measures Groundwater Monitoring	Sample Matrix: Water	
Project Number: 500-017-010	Sample Start Date: 12/4/2007	
Date Validated: 2/11/2008	Sample End Date: 12/6/2007	
Parameters: VOCs (8260B), Lead (EPA 6010B)		
Laboratory Project ID: SDG: HVO65, Sample Group: 1068767		
Data Validator: Andy Smith, Environmental Chemist		

DATA EVALUATION CRITERIA SUMMARY

A Tier III data validation was performed by Trihydro Corporation's Data Validation Group on the analytical data report package generated by Lancaster Laboratories evaluating samples from Cincinnati Soils Remedy, Hooven, Ohio. Precision, accuracy, method compliance, and completeness of this data package were assessed during this data review. Precision was determined by evaluating the calculated RPD values of samples from field duplicates pairs and laboratory duplicates pairs. Laboratory accuracy was established by reviewing the demonstrated percent recovery of matrix spike (MS), matrix spike duplicates (MSD), and laboratory control samples (LCS) to verify that none of the data were biased. Method compliance was established by reviewing holding times, detection limits, surrogate recoveries, method blanks, and laboratory control samples against method specific requirements. Completeness was evaluated by determining the overall ratio of the number of samples planned versus the number of samples with valid analyses. Determination of completeness included a review of the chain-of-custody, laboratory analytical methods, and all other necessary documents associated with this analytical data set.

SAMPLE NUMBERS TABLE

Client Sample ID	Sample Number	Laboratory Sample Code
MW-85D, 120407 Grab Water Sample	5231231	IM85D
MW-85I, 120407_Unspiked Grab Water Sample	5231232	IM85I
MW-85I, 120407_Matrix_Spike Grab Water Sample	5231233	IM85I
MW-85I, 120407_Matrix_Spike_Dup Grab Water Sample	5231234	IM85I
MW-85I, 120407_Duplicate Grab Water Sample	5231235	IM85I
MW-85S, 120407 Grab Water Sample	5231236	IM85S
ER2, 120407 Grab Water Sample	5231237	IMERB
Trip_Blank, 120607 Water Sample	5231238	IM-TB





The samples were analyzed for client-specified analytes. The samples were shipped to Lancaster Laboratories, Lancaster, PA, under chain-of-custody documents 0165358. The laboratory data were reviewed to evaluate compliance with the required methods and the quality of the reported data. A leading check mark (\checkmark) indicates that the referenced data were deemed acceptable. A preceding crossed circle (\otimes) signifies problems with the referenced data that may have warranted attaching qualifiers to the data.

- ✓ Data Completeness
- ✓ Holding Times and Preservation
- ✓ Calibrations
- ✓ Blanks
- ✓ System Monitoring Compounds
- ✓ Laboratory Control Samples (LCS/LCSD)
- ✓ Matrix Spike/Matrix Spike Duplicate (MS/MSD)
- Second
OVERALL DATA PACKAGE ASSESSMENT

Based on a data validation review, the data are acceptable as delivered. Three data point were qualified as "J" by the laboratory. The purpose of validating data and assigning qualifiers is to assist in proper data interpretation. Data which are not qualified meet the site data quality objectives. If values are assigned a "J" or "UJ" qualifier, the data may be used for site evaluation, with the reasons for qualification being given consideration when interpreting sample concentrations. Data points which are assigned an "R" qualifier should not be used for any site evaluation purposes. No data points were qualified as a result of this data validation review. All method detection limits (MDLs) were found to be acceptable and within client specified criteria. Some of the qualified data points are useful only for qualitative purposes with the professional judgment of the project manager and associated technical staff.

Data Completeness

All analyses were performed as requested on the chain-of-custody records. All samples were received by the laboratory and analyzed properly. The complete data package consisted of 44 data points, total. No data points were rejected. The data completeness measure for this data package is 100%.



Table 1. General Validation Criteria Checklist	
Did the laboratory identify any non-conformances related to the analytical data?	No
Comments: No non-conformances were noted by the laboratory.	
2. Were sample chain-of-custody forms complete?	Yes
Comments: The chain-of-custody forms appeared to be complete from the field to the laborator	y.
3. Were detection limits in accordance with the QAPP, permit, or method?	Yes
Comments: Requirements for detection limits were not supplied by the project manager, but ap all diluted samples were reported with target analyte detections.	peared acceptable since
4. Were the requested analytical methods in compliance with the QAPP, permit, or COC?	Yes
Comments: All constituents requested on the chain-of-custody form were reported.	
5. Were samples received in good condition?	Yes
Comments: Samples were received in good condition at a temperature of 2.1º Celsius.	
6. Were sample holding times met?	Yes
Comments: Samples were analyzed within method required holding times.	
7. Were correct concentration units reported?	Yes
Comments: Metals were reported in concentration units of mg/L and VOCs were reported in µg for the analysis of water samples.	/L, which is appropriate
8. Do the laboratory reports include all constituents requested to be reported for a specific analytical method?	Yes
Comments: All constituents and analyses requested on the chain-of-custody form were reporte	d by the laboratory.
9. Were the reporting requirements for flagged data met?	Yes
Comments: The laboratory qualified three data points as "J" indicating that the result is greater Method Detection Limit (MDL) and less than the Limit of Quantitation (LOQ).	than or equal to the
10. Were field duplicates collected on a 10% basis? Comments: No blind duplicates were collected as a part of this sampling event; however, this i sampling event and the lack of duplicates does not affect the quality of the data.	No s part of an ongoing
11. Were field duplicate RPD values less than 30%? Comments: N/A	N/A
12. Were equipment blanks, trip blanks, and field blanks collected on a 10% basis? Comments: One trip blank and one equipment blank were collected during this sampling event collected; however, this is part of an ongoing sampling event and the lack of blanks does not aff data.	
13. Were detections found in trip blanks, equipment blanks, or field blanks? Comments: No detections were reported in the trip blank or equipment blank associated with the	No nis data set.



Table 2. Validation Criteria Checklist for VOC analyses (8260B)			
Were the initial and continuous calibration verifications within acceptable limits?	Yes		
Comments: Initial and continuous calibration data appeared to be within quality control limits for all reported analytes.			
2. Was the instrument tuning results within method control limits?	Yes		
Comments: Instrument performance checks were performed in accordance with the EPA guidance and all ion abundance criteria appeared to be within the control limits.			
3. Were the internal standards within method control limits?	Yes		
Comments: The volatile internal standard area and retention time summary results were acceptable.			
4. Were method blank samples analyzed on a 5% basis?	Yes		
Comments: Method blank samples were prepared and analyzed on a greater than 5% frequency.			
5. Were method blank detections reported for this data set?	No		
Comments: There were no detections of reportable VOC analytes in the method blanks associate	ted with this sample set.		
6. Were laboratory control samples analyzed on a 5% basis?	Yes		
Comments: Laboratory control samples were prepared and analyzed on a greater than 5% frequency. Were laboratory control recoveries within acceptable limits?	Yes		
Comments: For batch L073461AA, all LCS recovery results for target analytes were within acceptable quality control limits.			
8. Were matrix spike samples prepared on a 5% basis?	Yes		
Comments: The laboratory prepared and analyzed one matrix spike and matrix spike duplicate sample from client samples MW-85I.			
9. Were matrix spike recoveries within acceptable limits?	Yes		
Comments: For batch L073461AA, all matrix spike recovery result for target analytes were within acceptable quality control limits. The RPD values were all below the maximum acceptable limit of 30%.			
10. Were surrogate recoveries within control limits?	Yes		
Comments: The surrogate recoveries for all samples were within acceptable limits for dibromofluoromethane (80-116%R), 1,2-dichloroethane-d4 (77-113%R), toluene-d8 (80-113%R), and 4-bromofluorobenzene (78-113%R).			
11. General Comments: The Method 8260B results are accepted as reported by the laboratory.			



Table 3. Validation Criteria Checklist for Metal Analyses (6010B) Were the initial and continuous calibration standards within acceptable limits? Yes Comments: One initial calibration and four continuing calibration verifications were reported with this data set. All recoveries were within the acceptable limits. Were the instrument tunings within method control limits? Comments: The percent recovery values for the low level ICP checks were within acceptable limits (91.3-104.7%). The percent recoveries for the initial and final interference checks were within acceptable control limits (98.5-103.8%). Serial dilutions were in accordance with the EPA guidance. Were the internal standards within method control limits? N/A Comments: Internal standards were not used in the analysis of metals. Were preparation blank samples analyzed on a 5% basis? Yes Comments: Preparation blank samples were prepared and analyzed on a greater than 5% basis. Were preparation blank detections reported for this data set? No Comments: No detections were reported for the preparation blanks associated with this data set. Were laboratory control samples analyzed on a 5% basis? Yes Comments: The laboratory analyzed LCSs on a greater than 5% frequency. Yes Were laboratory control recoveries within acceptable limits? Comments: Laboratory control sample results were within the quality control limits. Were matrix spike samples prepared on a 5% basis? Yes Comments: One MS/MSD sample pair was analyzed by the laboratory to document precision and accuracy in this analytical group. The MS/MSD pair was prepared from sample MW-85I. Yes Were matrix spike recoveries within acceptable limits? Comments: All matrix spike recoveries for metal analysis and reported RPD values were within the acceptable control limits. General Comments: The metals data are accepted as issued by the laboratory.

